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The Relationship Between Job Satisfaction and Collegial Support to Retention of Nurse Educators in Baccalaureate and Higher Degree Nursing Programs in Virginia

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**THE RELATIONSHIP BETWEEN JOB SATISFACTION AND COLLEGIAL
SUPPORT TO RETENTION OF NURSE EDUCATORS IN
BACCALAUREATE AND HIGHER DEGREE
NURSING PROGRAMS IN VIRGINIA**

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ABSTRACT

THE RELATIONSHIP BETWEEN JOB SATISFACTION AND COLLEGIAL SUPPORT TO RETENTION OF NURSE EDUCATORS IN BACCALAUREATE AND HIGHER DEGREE NURSING PROGRAMS IN VIRGINIA

by

Estella Mary Henry Reynolds
Old Dominion University, 1997
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ABSTRACT

This descriptive correlational study was designed to explore job satisfaction and collegial support in relation to the retention of nurse educators.

A survey questionnaire adapted from Batiste-Beaty (1990/1991) was used to collect data on nurse educators' retention rates and their perceptions of job satisfaction and collegial support in their present institutions. The survey was distributed to the 350 faculty members in the 12 baccalaureate and higher degree nursing programs in the Commonwealth of Virginia. The survey had a 51% return rate, with a total of 178 respondents. The two primary statistical procedures used in analyzing the data were Pearson's product-moment correlation and analysis of variance.

The data supported the first hypothesis, indicating that as job satisfaction increases, the likelihood of a faculty member's leaving his or her present position decreases. The second hypothesis was also supported in part, indicating that as the perception of collegial support increases, the probability of a faculty member's leaving his or her current institution decreases. The third hypothesis, which stated that

perceived job satisfaction would vary on the basis of four professional-demographic variables (academic rank, tenure status, level of professional education and age) was supported in all but one area, age. The fourth hypothesis which stated that perceived collegial support will vary on the basis of the four professional-demographic variables was supported only in part. It varied only on the basis of academic rank.

The findings revealed that job satisfaction and collegial support were correlated with retention of nurse educators in baccalaureate and higher degree nursing programs in Virginia. Additionally, significant relationships between the professional-demographic variables of academic rank, tenure status, and level of professional education and job satisfaction were found. A positive relationship was found between academic rank and collegial support. However, no relationships were found between age and the variables of job satisfaction and collegial support.

It is suggested that data from this study may be useful in considering issues of retention as the current and projected nursing supply-and-demand imbalance becomes a reality within the new millennium.

DEDICATION

Every journey begins with a direction. My mother, Mrs. Wessie Henry, and my mother-in-law, Mrs. Johnnie Reynolds, helped to focus my direction early in life, encouraging me to achieve my full potential and never to cease moving forward in my personal and professional development. I travel each day cherishing the memory of their unconditional love, wisdom, and all the wonderful lessons they taught me.

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CHAPTER I

INTRODUCTION

This research was designed to explore the retention of faculty members in baccalaureate and higher degree nursing programs. Why are some nurse educators choosing to remain at their institutions while others are choosing to leave? In view of the need for qualified nursing faculty to prepare a sufficient supply of future nurses (DeYoung and Bliss, 1995; Ryan and Irvine, 1994), factors that influence retention are worthy of attention.

Past research indicates that two of the factors involved in an individual's decision to stay in a particular occupational situation are his or her perceptions of (a) *job satisfaction* (Agho, Price, & Mueller, 1992; Herzberg, 1966; Herzberg, Mauner, & Snyder, 1959; Irvine & Evans, 1995; Klenke-Hamel & Mathieu, 1990; Price & Mueller, 1981) and (b) *collegial support* (Beyer, 1981; Cunningham & Gresso, 1993). The focus of this study, then, is to ascertain the relationship, if any, between the retention rates of nurse educators in baccalaureate and higher degree programs in the Commonwealth of Virginia and the educators' perceptions of job satisfaction and collegial support in their particular institutions. An important part of this focus is an investigation of how the professional-demographic factors of academic rank, tenure status, level of professional education, and age may be related to any differences in nursing faculty members' perceptions of job satisfaction and collegial support and how such perceptions are related to faculty members' inclination to remain in their positions (retention) or to leave them.

Theoretical Framework

Ryan and Irvine (1994) have observed that "there is a paucity of research on the factors influencing retention and attrition of nurse educators in higher education" (p. 68). Research on turnover in work organizations provides a theoretical framework that

may be useful in understanding these retention and attrition processes among nursing faculty (Price & Mueller, 1981; Irvine & Evans, 1995). Underlying this theoretical framework is the assumption that members who decide to leave an organization have similar reasons for doing so, and that, likewise, members who decide to stay in an organization have in common their reasons for staying as well. A major review of the literature on turnover in work organizations was done by Price (1977). Price and Mueller (1981) revised and expanded Price's original model of turnover in work organizations, producing what these two researchers have termed the *causal model of turnover*.

The causal model of turnover explores reasons members leave organizations. It consists of thirteen variables and their linkages, the measurement of which provides an explanation of the turnover process. In this model, seven variables (routinization, participation, instrumental communication, integration, pay, distributive justice, and promotional opportunity) center around the individual's interaction with the organization and are considered to be factors influencing satisfaction. All exert a positive influence on job satisfaction *except routinization*. Two intervening variables are job satisfaction and intent to stay. Three variables (professionalism, generalized training, and kinship responsibility) relate to "intent to stay." But of the three variables, kinship responsibility is the *only* variable that has a positive influence on intent to stay. Opportunity for alternative employment in one's profession is another variable in this "causal model." It is of special interest that Price and Mueller's sample consisted of nurses.

The present study operationalized four professional-demographic variables as being roughly equivalent to *four independent or predictor variables* and *one correlate* in Price and Mueller's (1981) causal model of turnover. Promotional opportunity was operationalized as academic rank, a job satisfaction indicator. Tenure status was operationalized as participation, a job satisfaction indicator. Professionalism and

general training were combined in the present study and operationalized as level of professional education, an intent-to-stay indicator. Age, which Price and Mueller (1981) examined in their analysis as one of three *correlates* (“sometimes termed demographic variables,” p.548), was operationalized in this study as the respondent’s age at nearest birthday.

Four other scholars also have provided insights into occupational attrition and retention that are useful for the present study. In their *dual factor theory on job satisfaction*, Herzberg, Mauner, and Snyder (1959; Herzberg, 1966)) observed that satisfaction occurred when motivator or intrinsic needs were met. Beyer (1981) stressed the importance of collegial support—interaction between and among faculty members that is based upon understanding, trust, encouragement, and open communication. Such interaction was found to provide a reference group in which concerns were validated and a sense of comradeship was experienced.

An underlying assumption of this study is that job retention is related to job satisfaction and collegial support, which are roughly equivalent to Herzberg et al.’s “intrinsic needs” and Beyer’s “collegial support,” respectively. Price and Mueller’s (1981) revised version (causal model of turnover) of Price’s (1977) model of turnover in work organizations indicated that a relationship exists between job satisfaction and turnover, with “intent to stay” mediating this relationship. Herzberg et al. (1959) and Beyer (1981) both identified variables that addressed the internally perceived needs of the individual—Herzberg et al. in speaking of intrinsic needs, pointing out non-monetary motivators that provide the individual with a sense of personal fulfillment, and Beyer in speaking of the sense of well-being that collegial support provides an individual.

The present study thus utilizes a model of retention that shares the structural characteristics of the Price and Mueller causal model of turnover, while drawing upon the dual-factor theory of job satisfaction developed by Herzberg et al. (1959) and Beyer’s (1981) concept of collegial support.

Limitations

The intent of the present study is twofold: (a) to ascertain whether perceptions of collegial support and job satisfaction differ among a group of nurse educators who choose either to remain in their teaching positions or to leave them and (b) to explore how their demographic status and personal and professional characteristics will be factored into their decisions. This research is limited to nurse educators employed in baccalaureate and higher degree nursing programs in the state of Virginia. The geographic location was selected after a report from the education committee of the Virginia Nurses Association identified the need for additional faculty to accommodate increased enrollments in Virginia's nursing programs (Redmond, 1992). Caution should therefore be exercised in generalizing the results of this study to other areas.

Care also should be taken not to assume that the findings of this study also describe the feelings of nursing faculty members in diploma or associated degree programs—although the data may provide some useful insights into their situation. This research, however, was designed to focus specifically on nurse educators employed in baccalaureate and higher degree programs.

Research Questions

To direct this study of nurse educators, the following research questions were developed:

1. What is the relationship between the retention of nurse educators in Virginia and their self-reported perceptions of job satisfaction?
2. What is the relationship between the retention of nurse educators in Virginia and their self-reported perceptions of collegial support?
3. Is there a difference in the perception of job satisfaction related to a faculty member's academic rank?
4. Is there a difference in the perception of job satisfaction related to a faculty member's tenure status?

5. Is there a difference in the perception of job satisfaction related to a faculty member's level of professional education?

6. Is there a difference in the perception of job satisfaction related to a faculty member's age?

7. Is there a difference in the perception of collegial support related to a faculty member's academic rank?

8. Is there a difference in the perception of collegial support related to a faculty member's tenure status?

9. Is there a difference in the perception of collegial support related to a faculty member's level of professional education?

10. Is there a difference in the perception of collegial support related to a faculty member's age?

11. Which elements of job satisfaction relate to retention?

12. Which elements of collegial support relate to retention?

Definition Of Terms

In this study, the following key terms are used:

Professional-Demographic information. Significant personal facts about nurse educators, including academic rank, tenure status, level of professional education, and age.

Collegiality. The relationship among associates in a professional setting where there is shared responsibility, authority, and respect for colleagues (Styles, 1982). An "emotional feeling of closeness to a group" that "grows out of an understanding and caring for one another" (Cunningham & Gresso, 1993, p. 99).

Collegial support. The character of interpersonal communications between faculty members, consisting of verbal and nonverbal interactions based on openness, mutual encouragement and reinforcement, collaboration, trust, confidence, creativity, and freedom from threat and intimidation. In measuring collegial support, usage was made of Batiste-Beatty's (1990/1991) adapted version of Beyer's (1981) Survey of

Collegial Communication which measured faculty members' perceptions of their colleagues' interactions with one another.

Job satisfaction. A function of an employee's affective response to various aspects of the task environment within which he or she performs prescribed duties, including institutional characteristics, salary and benefits, support services and facilities, policies, professional behavior, organizational climate, and interpersonal relations (Marriner and Craigie, 1977; Maslow, 1954). In this study, job satisfaction was measured using Batiste-Beatty's (1990/1991) adaptation of Marriner's (1975) Job Satisfaction Questionnaire.

Retention. An individual's continuous employment in the same institution over an extended period of time. For purposes of this study, "extended period of time" has been defined as three or more years as a nurse educator in a baccalaureate and higher degree program.

Significance of the Study

Both the recruitment and retention of an optimum number of faculty are crucial for baccalaureate and higher degree nursing programs. The supply of nurse educators affects the number of students that can be admitted to baccalaureate and higher degree nursing programs. This, in turn, affects the number of professional nurses that will be available for providing future health care, as well as the number that will pursue graduate studies in preparation for becoming the nurse educators of the future.

Thus, a shortage of faculty in nursing schools is a serious matter. During the present decade, the state of Virginia has been confronted with such a shortage. According to Redmond (1992), who reported the results of a study conducted by the Nursing Education Commission of the Virginia Nurses Association (VNA), student applications between 1990 and 1992 increased in 94% of the schools offering diploma

or baccalaureate programs. However, only 39% of these schools (12) responded to these increased applications by increasing enrollments. Among the other schools, a shortage of faculty was the most frequent reason cited for not expanding enrollments.

The VNA researchers found that an overwhelming majority (97 %) of nursing programs in Virginia experienced turnover of faculty in 1991, with respondents from one-third of the schools reporting faculty vacancies. Sixty-one percent indicated that they had experienced difficulty in recruiting faculty (Redmond, 1992).

According to the 1995-96 Commonwealth of Virginia Board of Nursing Annual Report, the full-time nursing faculty in Virginia's 12 baccalaureate programs increased by 3 (from 239 to 242) between the 1994-95 period and 1995-96. During this same period, the number of part-time nursing faculty in these programs increased by 41 (from 124 to 165). This increase indicates that a need exists for nursing faculty at the baccalaureate level, but the need is being filled by part-time faculty rather than full-time faculty. This same report stated that admissions in these 12 baccalaureate programs decreased by 367 (falling from 1,090 to 723). The finding that these 12 schools had to restrict their enrollments—in part because of a lack of trained faculty to provide instruction—indicates that indeed a dearth of nursing faculty exists.

Until now, the majority of studies reported in the literature have given more attention to the recruitment of nursing faculty than to the retention of faculty members once they have been recruited. Difficulties in recruiting faculty for nursing schools have been attributed to (a) non-competitive or unattractive salaries, especially when the compensation for nurse educators is compared to their professional counterparts in nursing (Louden and Jones, 1996), (b) increased opportunities in other settings, and (c)

insufficient numbers of academically qualified people from which to draw (Canavan, 1996; DeYoung and Bliss, 1995). The literature on the *retention* of nursing faculty in higher education is limited in both the amount of research reported and the depth of information provided. Even the literature devoted specifically to overcoming the shortage of minority nurse educators tends to ignore the question of keeping these educators after they have joined the faculty.

Two authors who do discuss the retention issue briefly are Loudon and Jones (1996), who suggest that one contributing factor to a nursing faculty shortage may be “the burnout of the present full-time faculty who are relied on more to meet the goals of the institutions, as the part-time faculty are often not involved in certain tasks, i.e., development” (p. 180). These authors also discuss the aging of nurse educators and retirement incentives being offered. They write, “Projections indicate that by the year 2006, an estimated one third of current faculty will retire or resign” (p. 180).

The momentous changes in American society have created major challenges for both higher education and the delivery of health care services. On every campus, new questions are being asked, new demands are being made, new anxieties—including serious financial pressures—are being faced; and technological advances are signaling new ways to go about the tasks of acquiring and applying knowledge. Hospitals, physicians, nurses, medical technicians, patients, insurers, and all others who make up society are having to adjust to different ways in which health care services are delivered and financed. What has been called the “graying of America”—the increasing numbers of older Americans in the population at large—poses yet another challenge (Chitty, 1997, p. 74). Nursing schools, as part of both the higher education enterprise and the

health care system, are being called upon to find and develop ways to respond to these challenges and changes (American Association of Colleges of Nursing [AACN], 1993; Loston, 1995; National League for Nursing, 1994; Pew Health Professions Commission, 1995; Walton, 1996; Stokes, Whitis, & Moore-Thrasher, 1997).

Interest in nursing careers is high. According to the American Association of Colleges of Nursing (AACN), enrollment in baccalaureate and master's programs in nursing "showed a statistically significant average increase of 2,898 students per year" over the five-year period between 1991 and 1995 (AACN, 1996, p. 5). But new admissions throughout the United States have continued to be sharply restricted because of the financial and other factors that have led to faculty shortages and resource constraints. An official report on the 1996-1997 AACN survey, which recorded a decline in entry-level bachelor's degree nursing program enrollments (although there was an increase in enrollments of registered nurses who were returning to school for bachelor's degrees), pointed out that budget constraints and other factors have contributed to a scaling back of enrollments even though applications remained strong (AACN, 1997a, 1997b).

According to the U.S. Department of Health and Human Services (1990), the need for nurses in all areas of the changing health care system is projected to increase through the year 2020. It has been estimated that only half the number of baccalaureate-prepared nurses needed for the top jobs in nursing will be available. This is the same pool from which nurse educators are drawn. The latest available government study on the topic, *The 9th Report to Congress: Health Care Personnel in the United States* (U.S. Department of Health and Human Services, 1993), called nursing education the

“key” to providing a well-trained supply of nurses to meet the added responsibilities of a changing health care delivery system. The report continued: “Nursing and nursing education are being challenged to provide for the increases in demand for baccalaureate-prepared professional nurses and master’s-prepared advanced practice nurses in nonhospital settings” (p. 7). To meet these challenges, sufficient numbers of highly trained nurse educators will be needed. Shortages could have serious ramifications.

Since either low recruitment or low retention can result in faculty shortages, research must be directed to both issues. This study focuses on only one of these crucial issues, namely, nurse-educator *retention* in baccalaureate and higher degree nursing programs in the Commonwealth of Virginia in view of the high attrition rate that characterizes nursing faculty (Redmond, 1992).

Overview

As innovative medical changes and social demands have expanded the role of the bedside caregiving nurse, some nurses have taken on the role of university academician. These nurse educators are the instructors of women and men whose nursing education will culminate with a baccalaureate or higher degree.

This emphasis on higher levels of education is a major indication of the extent of professionalization that has occurred in nursing (Oerman, 1997; Chitty, 1997; Zerwekh & Claborn, 1997). During the process in which an *occupation* is transformed into a *profession*, an increased emphasis is placed on the obtaining of particular knowledge and the development of skills requiring highly specialized training, the passing of qualifying examinations, licensing, and meeting all other requirements deemed necessary by the state professional regulatory board. Only then is an individual entitled to receive the credentials that show she or he is qualified to be a member of the

profession. Robertson (1977), in summarizing the pioneering work of Greenwood (1962), has pointed out that one of the five distinguishing characteristics of a profession as contrasted with a job or occupation is that "the skill of professionals is based on systematic, theoretical knowledge, not merely on training in particular techniques" (Robertson, 1977, p. 416). As nursing students are required to meet these increasing educational demands, the retention of qualified nurse faculty members has thus become a critical issue confronting nursing education (Kalish & Kalish, 1986).

Through this study of the perception of job satisfaction, collegial support, and professional-demographic characteristics of nurse educators who have remained in baccalaureate and higher degree nursing programs, it is hoped that light will be shed on the issue of retention. The relationships among these variables have heretofore not been demonstrated. This study was therefore designed to yield data to determine the degree to which perceptions of job satisfaction and collegial support may influence the retention of nursing faculty in baccalaureate and higher degree nursing programs.

The background, definition of terms, and overall framework of the study having been presented in this introductory chapter, it remains for the following chapters to describe the research and findings in depth. In chapter 2, a review of relevant literature is discussed. Chapter 3 includes an explanation of the sample, methodology, and procedures used in the study. A presentation of data analysis is found in chapter 4, with chapter 5 providing the summary, conclusions, and recommendations derived from this study based on the data presented in chapter 4. Finally, the appendixes contain additional information applicable to this study and background information for the data contained in the body of this dissertation.

CHAPTER II

REVIEW OF THE LITERATURE

Before any substantive analysis of the factors that impact job satisfaction among nurse educators can be undertaken, it will be beneficial to review the recent history of supply and demand for nurse educators. Numerous articles addressing this topic have appeared in nursing professional journals during the present decade (Canavan, 1996; DeYoung & Bliss, 1995; Hall-Long, 1995; Mullinix, 1990; Princeton, 1992; Ryan & Irvine, 1994).

Supply And Demand For Nurses And Nurse Educators

Concerns have been expressed by various authors about a projected undersupply of nurse educators to train students enrolling in baccalaureate and master's degree nursing programs. Princeton (1992) documented that the American Nurses Association (ANA) may have inadvertently contributed to a nurse educator shortage by initially supporting clinical training over nurse educator training. In 1969, The American Nurses Association's "Statement on Graduate Education in Nursing," emphasized that "the major purpose of graduate education should be the preparation of nurse clinicians capable of improving nursing care through the advancement of nursing service and theory" (quoted in Princeton, 1992, p. 34). However, in 1978, the ANA modified its position and emphasized the "importance of including the teaching and administration components within the master's programs" (Princeton, 1992, p.34). Princeton went on to show that the Perspectives Committee of the National League for Nursing also began emphasizing in 1979 that more attention should be given to the preparation of nurse

educators and suggested that students be given the opportunities to choose teaching and administration careers in nursing.

Unfortunately, this “balanced” graduate nursing pedagogy advocacy came too late: graduate schools of nursing were producing clinicians and not educators—at least not enough educators. This imbalance resulted in the practice of clinicians filling vacant nurse educator positions. Thus, the chronic need for nurse educators was exacerbated by clinicians assuming nurse educator positions for which they were not properly trained.

Mullinix (1990) called attention to the 30% decline in nurse educators in baccalaureate and higher degree programs that occurred between 1984 and 1988. This happened during a period when “licensed practical nurse, licensed vocational nurse, diploma, associate degree, and other nurse education programs evidenced gains in the number of nurse educators employed” (p. 133).

The *1994 Nursing Data Review*, issued by the Division of Research of the National League for Nursing (NLN), concluded that while there was not clear evidence of a nurse educator shortage as such at the time of the 1992 survey reported in that particular volume of the *Review* (with shortage having been defined as “the inability to recruit candidates for budgeted positions despite active recruitment efforts,” ([NLN, 1994, p. 191])), the issue of *quality education* must be faced. The *Review*’s authors pointed out that, because of financial constraints, schools of nursing—like other institutions of higher education—were increasingly filling faculty positions with part-time faculty. Part-time faculty tend to be less highly credentialed than full-time faculty.

The *1996 Nursing Data Review*, issued two years later, showed a continuation of these trends, with part-time faculty having increased by 29%, whereas full-time faculty had shown only a 1.4 percent increase (NLN, 1996). (This 1996 *Review* presented the findings of the NLN survey conducted in 1994. These are the latest available statistics because of the length of time required for the detailed data analysis and publication of the survey findings.) In their commentary on the report, Loudon and Jones (1996) wrote that “the majority of full-time graduate nursing students (56.4%) are pursuing nurse practitioner specialties and only 8.7% were in the teaching specialty” (p. 180). In addition, these authors pointed out the increased job options open to nurses with graduate degrees and saw the potential of a nursing faculty shortage on the horizon.

Canavan (1996) called attention to the shortage of faculty with doctorates, a situation compounded by “the fact that most nurses entering doctoral programs tend to be anywhere from 10 to 20 years older than doctoral students in other disciplines, meaning shorter academic careers” (p.1). The report entitled, *1995-1996 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*, published by the American Association of Colleges of Nursing (AACN), showed that although there was a five-year trend of increases in RN baccalaureate and master’s enrollments and graduations, “there were not significant increases in the total number of doctoral enrollees. . . Likewise, there was no increasing trend in the number of doctoral graduates.” The authors of the report expressed surprise “given the continued increase in the number of doctoral programs” (AACN, 1996, p. 5).

By the fall of 1996, however, enrollments in doctoral programs in nursing had

increased 3.7% over enrollments a year earlier. At the same time, enrollments in entry-level bachelor's degree programs had declined, and master's degree enrollments were also down for the first time since 1988 (AACN, 1997a, 1997b). The president of the American Association of Colleges of Nursing, Carole Anderson, attributed the decline in entry level bachelor's and master's enrollments to limited resources rather than lack of student interest in nursing careers. She reported that many deans had deliberately cut enrollments "because of budget and other constraints that have produced faculty shortages and limited the number of slots for clinical training at a host of schools that have been forced to hold down class size (AACN, 1997b, p. 2). She commented that, in spite of the 3.7% growth in doctoral degree enrollments in the fall of 1996, enrollments over the preceding five years had grown by only 26 doctoral students per year nationwide. "far short of the numbers needed to produce a sufficient pool not only of nurse scientists, but also educators to teach future nurses" (AACN, 1997b, p.3).

Ryan and Irvine (1994), concluded from data gathered in a national study of National League for Nursing-accredited baccalaureate and higher degree nursing programs that approximately one third of the current faculty workforce would either retire or resign by the year 2006. They pointed out that "doctorally prepared candidates will most certainly not fill all the gaps that will exist in nursing education" (p. 67).

DeYoung and Bliss (1995) listed various causes or contributions to shortages of nursing educators, including such factors as the aging of the faculty, lack of job security, inadequate or noncompetitive salaries, and increased job opportunities outside the teaching field for nurses with graduate degrees. Among the nine solutions these authors considered, two seem to be specifically related to the present study with its

emphasis on job satisfaction as a major factor associated with retention: (a) improvements in salaries and (b) adding to and emphasizing other benefits of faculty positions (i.e., higher rank, early promotion, lighter teaching loads, released time and support for research, more liberal sabbatical policies, scholarships or free tuition for children of faculty). The other factors mentioned by DeYoung and Bliss were concerned with federal funding, changes in educational programs and policies, and the like. Hall-Long (1995) advocated efforts to increase the supply of nurse educators through the formalization and integration of political strategies by professional nursing organizations and individual nurses. Hall-Long's article highlighted the fact that professional nursing organizations and individual nurses could no longer afford to be inactive in the political process: political inactivity could result in underfunding of the NEA or its possible elimination. Such outcomes would have disastrous effects on the future of nursing as a profession and would negatively impact the supply of nurse educators.

Job Satisfaction and Retention

Job satisfaction is one of the two primary variables examined in the present study. A number of studies shed light on the role of job satisfaction among nursing professionals. Kennerly (1989), for example, found that private college baccalaureate nursing faculty experienced job satisfaction when their deans/chairs employed the leadership behaviors of "consideration" and "initiating structure" in an approximately equal manner. Also, her findings revealed that "the number of nurse faculty and the number of students in the college were . . . variables moderating the relationship between leadership behavior and job satisfaction" (p. 198). She concluded that high

levels of the behaviors of consideration and initiating structure are possible fertile areas to be explored in achieving high levels of job satisfaction.

Moss and Rowles (1997) in a study of 623 staff nurses found that job satisfaction increases the closer the management style of their head nurses is perceived to be participative. By examining four management styles, they found that job satisfaction was lowest under the management style labeled “exploitive/authoritative,” a little higher under the “benevolent/authoritative” management style, and higher yet when staff nurses worked under head nurses using the “consultative” management style. The highest job satisfaction of all was labeled “participative” and was characterized by such attitudes and behaviors as mutual respect in which superiors demonstrated confidence in subordinates and valued their ideas, free and open communication, and shared goals.

Jamal (1990), in a groundbreaking study of 215 full-time nurses in a large Canadian hospital, examined job stress and its relationship to four criterion variables (job satisfaction, organizational commitment, psychosomatic health problems, and turnover). This research was unique because of the “firsts” that were incorporated in the methodology: (a) It was the first time that both job stress and job stressors (role ambiguity, overload, conflict, and resource inadequacy) were used as predictor variables, and (b) it was the first time that the focus was on Type-A behavior within the theoretical confines of the “person-environment fit” model.

Jamal tested the following three hypotheses:

1. Job stress and stressors will be negatively related to job satisfaction, organizational commitment, and positively related to psychosomatic health problems and turnover motivation.

2. Type-A employees will be higher on job stress and stressors, psychosomatic health problems, and turnover motivation than Type-B employees. Organizational commitment and job satisfaction will be higher for Type-B employees than for Type-A employees.

3. Type-A behavior will be an important moderator of job stress and outcome relationship. That is, Type-A employees with high job stress will be more seriously affected than Type-B employees in similar situations.

All hypotheses were accepted *except* the second statement of hypothesis 2.

Type-B employees were not found to have higher organizational commitment and job satisfaction than was true of Type-A employees.

In a questionnaire survey of seven hospitals in which 171 of 320 nurses and nurse managers responded, Knoop (1994) discovered that "pride in the organization" accounted for 66% of the variance in explaining a commitment to their hospitals. This finding has significance in viewing the topic of nursing professionals' job satisfaction and employment retention, because values are an integral component of the three-part matrix that comprises commitment. The remaining two components are "a willingness to expand effort for the organization, and a wish to retain membership in the organization" (p. 200). Commitment is positively correlated with job satisfaction. Thus, anything that compliments or reinforces commitment may contribute to the job satisfaction/job retention paradigm. As three other researchers have pointed out, "People who are highly committed to their work organizations are willing to devote more effort to the organization, identify more with the values of the employer, and seek to maintain their affiliation with the organization (Marsden, Kalleberg, and Cook, 1993).

Researchers from various professional disciplines have pursued the relationship of job satisfaction and its impact on employee retention. Among them are Blegen and

Mueller (1987); Christian (1986); Pizer, Collard, James, & Bonaparte: (1992); Fain (1987); Klenke-Hamel & Mathieu(1990); and Agho, Price, and Mueller (1992).

In a study that utilized "Need Fulfillment Theory" as its theoretical underpinning, Christian (1986) administered two self-designed instruments to a sample composed of "163 faculty in eight state-supported baccalaureate/masters programs" (Abstract, p. 378). The specific "need fulfillment" model employed was one designed by Porter (1961). This model uses a "discrepancy" index score to measure the difference between what an employee believes that he or she should receive and what the employee actually receives. The smaller the "gap" or difference between these two measures, the greater the employee's satisfaction level. The measure of what an employee believes he or she should receive was operationalized in the persona of the employee's (faculty member's) department chairperson. Therefore, if the faculty member believed that the departmental chairperson had the means to satiate the faculty member's "believed needs" but did not do so, the faculty member experienced some degree of job dissatisfaction. The larger this gap, the greater the job dissatisfaction.

Fain (1987), conducted questionnaire research with nurse educators that examined "nurse educators' perceptions of role conflict and role ambiguity and compared these with reported facets of job satisfaction" (p. 233). He employed a model of role dynamics that was developed by Kahn et al. (1964). This model assumes that individuals are impacted by a multitude of expectations within their work environment that may "affect the perceptions of their organization roles" (p. 233). Superimposed upon these environmental work expectations are a triumvirate of factors that define the parameters of the individual's role. These factors are the role boundaries set by the

employing institution, the role boundaries that are circumscribed by the individual's employee cohorts, and the role boundaries that are imposed by the individual's personality. Results revealed that role conflict (opposing demands of two or more distinct roles) and role ambiguity (nebulous definition of a specific role) were associated with "low levels of job satisfaction" (p. 238). These low levels of job satisfaction extended across all five facets of job satisfaction as operationalized with this research study: satisfaction with work, satisfaction with co-workers, satisfaction with pay, satisfaction with supervision, and opportunities for promotion.

A longitudinal study of nurses' job satisfaction was conducted by Blegen and Mueller (1987) that analyzed "13 causal determinants and five correlates measured at Time 1, and job satisfaction measured at Time 2" (Abstract, p. 227). These authors employed the causal model developed by Price & Mueller (1981, 1986). This model consists of the following variables that impinge on satisfaction:

1. Opportunity
2. Routinization
3. Autonomy
4. Job Communication
5. Social Integration
6. Distributive Justice
7. Promotional Opportunity
8. Motivation
9. Pay
10. Workload
11. General Training
12. Kinship Responsibility
13. Unit Size

Some of the above model variables from Price and Mueller were incorporated in the Blegen and Mueller study, and others that were more appropriate for its particular sample were added (age, day shift, and jobs outside the employing hospital). Listed

below are the variables, in order of importance, that were statistically significant:

1. Routinization
2. Promotional Opportunity
3. Distributive Justice
4. Age
5. Day Shift
6. Workload
7. Kinship Responsibility
8. Opportunity for jobs outside of the employing hospital

However, after controlling for the prior level of job satisfaction (Time 1), the only variable that remained statistically significant in its effects was "day shift."

Replication and extension of research explored by Bedeian and Armenakis (1981) were the means utilized by Klenke-Hamel and Mathieu (1990) to unravel the possible relationship that exists between job satisfaction and an employee's "propensity to leave" his employment. These authors noted that Bedeian and Armenakis's causal model "proposed that role conflict and role ambiguity act to increase employees' job-related tension and propensity to leave the organization, and decrease levels of job satisfaction." They also noted that Bedeian and Armenakis "specified intermediate linkages and suggested that employees' job-related tensions lowered their job satisfaction which, in turn, increased their propensity to leave." (Klenke-Hamel and Mathieu, 1990, p. 792)

Klenke-Hamel and Mathieu (1990) wanted to find out, therefore, how the Bedeian and Armenakis causal model might apply to various employee populations. Data from four distinct population samples (blue collar, staff, engineers, and university faculty) were analyzed. These data showed that Bedeian and Armenakis' model "received support in only the staff sample." (p. 799). Summarizing the overall results of

all five studies, inclusive of their own. Klenke-Hamel and Mathieu concluded the following:

1. The negative impact of job satisfaction on employees' propensity to leave has been supported in all employee populations examined thus far.
2. Role ambiguity has decreased job satisfaction among all groups except the hospital employees from Jackson (1983).
3. Role conflict has a negative influence on job satisfaction with hospital employees (Jackson, 1983).

Agho, Price, and Mueller (1992) pursued research that sought clarification which would ascertain "empirically whether employees could discriminate between questions designed to measure job satisfaction from those designed to measure positive affectivity and negative affectivity" (p. 187). This information was of importance because of a shift from utilizing "situational" variables (autonomy, routinization, and work group cohesion) to explain variations in job satisfaction to utilizing the "personality" variables of positive affectivity and negative affectivity. Thus, Agho, Price, and Mueller wanted to know if dispositional affectivity (both positive and negative) was tantamount to high and low job satisfaction. This was necessary because if the answer was *yes*, all the studies that had used dispositional affectivity to explain high or low job satisfaction levels for employees would lead to the circular reasoning that "job satisfaction is a determinant of job satisfaction" (p. 187) or dispositional affectivity is a determinant of dispositional affectivity.

This study by Agho, Price, and Mueller (1992) surveyed the employees of a 327-bed Veterans Administration Medical Center located in the midwestern United States. Included in the sample were administrators, physicians, nurses, technicians, social

workers, psychologists, clerical employees and blue-collar workers. "The sample consisted of 199 (36.2 per cent) men, and 351 (63.8 per cent) women" (p. 187).

A total of 550 (67 per cent) of 823 questionnaires were returned. The constructs that questionnaire items were designed to identify were

measured by multiple-item scales. Satisfaction was operationalized using six items selected from the 18-item index developed by Brayfield & Rothe (1951). The validity and reliability of this six-item, global satisfaction index has been demonstrated in previous studies (Brooke et al., 1988; Price & Mueller, 1981, 1986; Sorenson, 1985; Wakefield, 1982). In this study, this satisfaction scale achieved an acceptable reliability level with a Cronbach's alpha of .90 (p. 187).

Agho, Price, and Mueller used five measurement models which represented "different factor configurations of the 28 items used to assess satisfaction, positive affectivity and negative affectivity" (p.192). It was found that the three-factors (satisfaction, positive affectivity, and negative affectivity) provided the best "fit" for the data. The factor analysis results indicated "that employees are able to distinguish between questions designed to assess the extent to which they like their job (job satisfaction), the extent to which they are predisposed to be happy (positive affectivity), and the extent to which they are predisposed to experience discomfort (negative affectivity)" (p.192). Simply stated, job satisfaction, positive affectivity, and negative affectivity are *not* measuring the same underlying construct.

Looking at job satisfaction from another angle in relation to retention, Pizer, Collard, James and Bonaparte (1992) sought to answer the question: Are there differences in job satisfaction between foreign- and United States-educated nurses? These researchers were interested in job satisfaction because "studies of U.S. nurses suggested that job satisfaction is correlated to . . . job turnover (Curry, Wakefield, Price,

Mueller, & McCloskey, 1985)"(p. 301). They provided empirical data that demonstrated that U.S. hospitals had recruited foreign-educated nurses to ameliorate the shortage of U.S.-educated nurses as early as World War II and had continued this practice up to and including the present. Therefore, since foreign-educated nurses were a "safety valve" to counter the shortage of U.S.-educated nurses, and since research had suggested that job satisfaction is correlated with job turnover, Pizer et al. hypothesized that if foreign-educated nurses' perception of job satisfaction was correlated similarly to that of U.S.-educated nurses, then simply replacing U.S.-educated nurses with foreign-educated nurses would not correct the problem of a nursing shortage in U.S. hospitals. And, the "efficacy of this strategy" would be brought to question.

Research results revealed no differences in the level of job satisfaction between foreign and U.S.-educated nurses. Although initial analyses did indicate that foreign-educated nurses' job satisfaction level was greater than U.S.-educated nurses, this "difference disappeared when age and tenure of employment were controlled in subsequent analyses" (p. 305).

In a meta-analysis of nurse job satisfaction and behavioral intentions, Irvine and Evans (1995) initially examined 22 studies, 11 from each of these two categories. This number was later modified to a total of 19 studies, 11 on job satisfaction and 8 on behavioral intentions. The research causal model adopted was "based on Mueller and Price's (1990) conceptualization, which summarizes the relationship among economic, sociological, and psychological variables and nurse satisfaction, behavioral intentions, and turnover behavior"(p. 246). Specifically, this model states that the above three variables impact job satisfaction, which impacts behavioral intentions, which impacts

turnover. However, this model suggests that the relationship between behavioral intentions and turnover is more direct than the relationship between job satisfaction and turnover “since the impact of job satisfaction is mediated by behavioral intentions.” (p. 247).

Meta-analytic results were consistent with the modified Mueller and Price model: “A strong positive relationship was indicated between behavioral intentions and turnover; a strong negative relationship between job satisfaction and behavioral intentions; and a small negative relationship between job satisfaction and turnover” (Irvine and Evans, 1995, abstract, p. 246). The researchers concluded that “the work content and work environment variables appear to have a stronger relationship with satisfaction than either the economic or individual difference variables” (p. 251). This result led the researchers to postulate on policy implications by stating, “The results of this meta-analysis underscore the importance of factors related to nurse job satisfaction that are clearly under the control of health care administrators and managers” (p. 251).

This section has reviewed research articles that spanned the 1986-1995 time frame. Although the specifics of each article varied, their overall conclusions were similar: All researchers’ results indicated that a relationship *does* exist between job satisfaction and employee retention rates. These articles covered the following specific research areas that have relevance to the present study:

1. The effect of management/leadership styles and behavior on employees’ job satisfaction.
2. The positive association between job stress and stressors and lower job satisfaction and higher turnover motivation.
3. The positive relationship between commitment to an organization and job satisfaction and continued affiliation with that organization.

4. Need fulfillment theory operationalized in the persona of the department chairperson in regards to employee job satisfaction.
5. Role dynamics and its impact on employee job satisfaction through the role boundaries of the employing institution, the employee's cohorts, and the employee's personality traits.
6. The ability of Price and Mueller's 13-variable causal model to explain the relation between job satisfaction and employee retention.
7. Role conflict and role ambiguity's impact on an employee's propensity to leave employment through the mediating influence of job-related stress.
8. Cross-employee population samples that supported the negative impact of role conflict/ambiguity and job satisfaction on an employee's propensity to leave employment.
9. An empirical investigation of whether job satisfaction, positive affectivity, and negative affectivity measure the same underlying construct. (They do not. The extent to which employees report liking or disliking their job (job satisfaction or dissatisfaction) is not the same as their reported propensity to be happy or unhappy (dispositional positive or negative affectivity.)
10. Research to ascertain whether foreign-educated and United States-educated nurses perceive job satisfaction similarly in view of the association between job satisfaction and job turnover.
11. A meta-analysis of job satisfaction, based on Price and Mueller's model of economic, sociological, and psychological variables and nurse satisfaction.

Collegial Support and Retention

Collegial support, the second primary variable used in this study, addresses the relationship of employees in general with their co-workers and specifically nurse educators with their colleagues. Researchers who have focused their efforts in this area are Adams (1995), Astin (1987), Beyer (1981), Copp (1994), and Fong (1993).

In a seminal article entitled, "Interpersonal Communication as Perceived by Nurse Educators in Collegial Interactions, Beyer (1981) analyzed collegial support

among nursing faculty and found that “actual interpersonal interactions among colleagues were less supportive than was desirable and that nurse educators were dissatisfied with collegial communication” (abstract, p. 111). This study examined 222 full-time female educators within baccalaureate schools of nursing in Texas. Interpersonal communication was operationalized by “the Survey of Collegial Communication in which subjects described their perceptions of interactive behaviors among their faculty colleagues”(p. 112). This article firmly thrust the topic of collegiality into the mainstream of academic research on job satisfaction levels in general and within the nursing profession in particular.

Astin (1987), in a brief article in *The Chronicle of Higher Education*, lamented the lack of recognition shown faculty members in the area of interpersonal relations with their colleagues. He emphasized that no formal mechanism has been instituted that would incorporate into formal evaluations this “most important. . . talent that a faculty member can have”(p. 43).

On a similar note, Balsmeyer, Haubrich, and Quinn (1996) pointed out that, in colleges of nursing, “collegiality is a performance requirement for promotion and tenure, but the behaviors synonymous with collegiality are frequently unwritten within the academic community as well as being poorly defined in the literature” (p.264). They found that one way to work out a definition was through the utilization of the Delphi technique, a special group process in which experts in a field anonymously interact over a period of time defining and refining until a consensus is reached on some issue.

Balsmeyer, Haubrich, and Quinn (1996) reported that their use of a modified

Delphi study, which included all faculty members of a midwestern university's department of nursing, "yielded specific behavioral indicators for the four broad statements that describe collegiality in the governance document of the university" (p.264). These four areas were expanded upon to highlight certain behaviors, namely (a) willingness to serve on committees and otherwise work cooperatively in meeting departmental needs and performing departmental work; (b) "willingness to provide guidance and help to colleagues in their professional duties"—including mentoring, adjusting schedules when necessary, giving advice, making suggestions, and sharing resources with colleagues; (c) respecting the ideas of others—including listening, making eye contact, supporting those with new ideas, soliciting input from others without trying to control project outcomes, and being open to different opinions so that working together could proceed smoothly even when there were disagreements; and (d) conducting one's life as a professional without prejudice, demonstrating a respect for diversity and showing sensitivity, courtesy, and respect toward others.

Fong (1993), in a two-year longitudinal study that focused on "burnout" among nurse educators, utilized three data collection methods: (a) a mailed questionnaire, (b) on-site formal interviews, and (c) document reviews. The original questionnaire return rate was 90% (140) of the 156 full-time nursing educators who received them. Two years later, this number had decreased to 54% (84). The researcher postulated the following:

Role overload (i.e., the extent to which a person has too much to do or when the work is perceived as too difficult) and social support (i.e., the extent of emotional caring by significant others) were directly related to,

and often the cause of burnout. (p 25)

Fong discovered that “job demands, time pressure, and job inadequacy correlated significantly and positively with emotional exhaustion at Time 2” (p. 27). Further results indicated that “the degree of support from one’s chairperson and peers correlated significantly and negatively with all three aspects of burnout at Time 2” (p. 27). And “job demands were the most significant predictor of emotional exhaustion” (p. 27).

Copp (1994) discussed a continuum of faculty interpersonal relations that ranged from collegiality on one end to litigation on the other and emphasized how the “awareness of one’s contribution to the milieu can affect our professional careers; our health and the health of others; our attitude about the work setting; the educational process itself; and the goals of departments, schools, colleges, and the university” (p. 195). Thus, the collegial end of the continuum is significant in creating an environment that is conducive to cementing bonds between colleagues. And this in turn assists in the retention rates of faculty.

Beyer’s Survey of Collegial Communication was the instrument used in a “descriptive exploratory” study that collected data through the mail. The study’s focus addressed the question: “Do full-time nursing faculty perceptions of workload and collegial support differ with changes in the proportion of part-time faculty in Comprehensive I. baccalaureate nursing programs?” (abstract, p. 305). Results indicated *no* differences in the collegial support perceived among full-time faculty participants as more use was made of part-time faculty.

The articles in this section have focused on collegial support and its relationship

to employee retention generally and to nurse educators specifically. An examination of this literature has shown the relevance of collegial support as a concept to be investigated. In particular, the literature

1. Firmly established the topic of collegial support as a legitimate academic pursuit in regard to job satisfaction levels in general and within the nursing profession specifically.
2. Expressed the need for an operational definition of collegiality as a faculty evaluative tool.
- 3.. Showed that the extent of role overload and perceived inadequate social support are directly related to burnout.
4. Reported the value of a continuum concept of interpersonal relations for individual awareness and the cementing of collegial bonds between faculty colleagues.
5. Reported no perceived differences in collegiality among full-time nursing faculty because of the increased use of part-time faculty.

The above research suggests that because collegial support plays an important role in job satisfaction and the prevention of burnout, a relationship may exist between collegial support and employee retention.

Professional-Demographic Factors and Nurse Educator Retention Rates

Although job satisfaction and collegial support were the primary variables analyzed in relation to nurse educator retention in the present study, other factors may exert tangential influence. Listed below, with accompanying referenced research support, are specific examples of various professional- demographic characteristics that have been examined in connection with retention rates:

1. *Academic rank* (Balsmeyer, Haubrich & Quinn, 1996; Hill, Bahniuk & Dobos, 1989)
2. *Tenure status* (Fong, 1993; Irvine & Evans, 1995)
3. *Level of professional education* (Canavan, 1996; Fong, 1993; Klenke-Hamel

& Mathieu, 1990)

4. *Employment status* (Christian, 1986; Pizer, Collard, James Bonaparte, 1992; Rantz, Scott & Porter, 1996; Tack & Patitu, 1992;)

5. *Number of years at present nursing institution* (Christian, 1986; Pizer, Collard, James & Bonaparte, 1992)

6. *Administrative position* (Blegen & Mueller, 1987; Rantz, Scott, & Porter, 1996)

In the study reported here, however, focus will be narrowed to four professional-demographic factors: *academic rank* (Balsmeyer, Haubrich & Quinn, 1996; Hill, Bahniuk, & Dobos, 1989), *tenure status* (Fong, 1993; Irvine & Evans, 1995), *level of professional education* (Canavan, 1996; Fong, 1993; Klenke-Hamel & Mathieu, 1990), and *age* (Canavan, 1996; Ryan and Irvine, 1994; AACN, 1997b).

Summary

This review of the literature has examined changing patterns of supply and demand for nurses and nurse educators, with an emphasis on the need for sufficient numbers of highly trained nursing professionals to meet the changes and challenges in health care today and in the future. This emphasis is apt in view of the specific purpose of this study, which is to ascertain the degree to which perceptions of job satisfaction and collegial support may influence the retention of nursing faculty in baccalaureate and higher degree nursing programs in Virginia.

A review of general factors of job satisfaction in relation to attraction and retention of nursing professionals was presented. The studies indicated that turnover is less likely to occur when employees are satisfied with their jobs. An awareness of these factors could be useful in helping professional nursing policy makers strive to

accommodate those employee needs that enhance employee job satisfaction. thus improving employee retention. The relationship between job satisfaction and nurse educator retention rates was further elucidated through the work of numerous researchers who looked at this relationship from different angles. The primary findings from the articles reviewed in this section were represented in the principal results of a meta-analysis included among the articles examined. The meta-analysis of studies on nurse job satisfaction, behavioral intentions, and turnover showed that “a strong positive relationship was indicated between behavioral intentions and turnover; a strong negative relationship between job satisfaction and behavioral intentions; and a small negative relationship between job satisfaction and turnover” (Irvine & Evans, 1995, abstract, p. 246)

The review of research on job satisfaction(one of the primary variables of this study) and retention was followed by a review of research on the second primary variable (collegial support) and its relationship to nurse educator retention rates.. The studies reviewed suggest that a relationship exists between collegial support and employee retention in general and among nursing professionals specifically. Finally, professional-demographic factors and nurse educator retention rates were listed along with research articles that supported their influence on nurse educator retention rates.

CHAPTER III

METHODOLOGY

Chapter 3 describes the methodology utilized for this study. Included are details concerning the population examined, the research design, the instrument used to collect data, and the procedures employed for data collection and analysis.

A descriptive survey, incorporating a descriptive correlational research design, was mailed or hand-delivered for distribution to the nurse educators in schools of nursing with baccalaureate and higher degree programs. A mailed questionnaire was appropriate because (a) it permitted the researcher to reach faculty in geographically dispersed institutions throughout the Commonwealth of Virginia; (b) respondents could answer the questions at their convenience; and (c) by allowing for anonymity, the questionnaire was more likely to elicit candid responses.

Hypotheses

Specifically, the research project was designed to test the following four hypotheses:

1. The greater the perceived job satisfaction among faculty in baccalaureate and higher degree nursing programs in Virginia, the greater will be the faculty retention.
2. The greater the perceived collegial support among faculty in baccalaureate and higher degree nursing programs in Virginia, the greater will be the faculty retention.
3. Perceived job satisfaction will vary positively on the basis of four professional-demographic factors: academic rank, tenure status, level of professional education, and age.
4. Perceived collegial support will vary positively on the basis of four professional-demographic factors: academic rank, tenure status, level of professional education, and age.

Research Questions

The following research questions were developed to direct this study (the hypothesis to which each question relates is listed in parentheses):

1. What is the relationship between the retention of nurse educators in Virginia and their self-reported perceptions of job satisfaction? (Hypothesis 1)
2. What is the relationship between the retention of nurse educators in Virginia and their self-reported perceptions of collegial support? (Hypothesis 2)
3. Is there a difference in the perception of job satisfaction related to a faculty member's academic rank? (Hypothesis 3)
4. Is there a difference in the perception of job satisfaction related to a faculty member's tenure status? (Hypothesis 3)
5. Is there a difference in the perception of job satisfaction related to a faculty member's level of professional education? (Hypothesis 3)
6. Is there a difference in the perception of job satisfaction related to a faculty member's age? (Hypothesis 3)
7. Is there a difference in the perception of collegial support related to a faculty member's academic rank? (Hypothesis 4)
8. Is there a difference in the perception of collegial support related to a faculty member's tenure status? (Hypothesis 4)
9. Is there a difference in the perception of collegial support related to a faculty member's level of professional education? (Hypothesis 4)
10. Is there a difference in the perception of collegial support related to a faculty member's age? (Hypothesis 4)
11. Which elements of job satisfaction relate to retention? (Hypothesis 1)
12. Which elements of collegial support relate to retention? (Hypothesis 2)

Research Population

The 1996 Annual Report of the Virginia Board of Nursing listed the 12 baccalaureate and higher degree programs located in the Commonwealth of Virginia. These 12 programs employed 350 nursing faculty members, of whom 239 were full-time and 111 were part-time/adjunct faculty members. The faculty members from all 12 programs comprised the population for the study.

Aggregated data were used to answer the study's hypotheses. Power analysis was used to determine the minimum number of respondents required from the accessible population of 350 nursing educators in Virginia to determine the significance of the correlational relationships and comparisons made between the nursing educators and job satisfaction and collegial support findings, as well as to ascertain the generalizability of the data to nursing educators outside the Commonwealth of Virginia. A power analysis at the .05 significance level also assisted the researcher in selecting data analysis techniques and the measurement tools. The results of the power analysis revealed that, of the 350 questionnaires distributed, 165 needed to be returned. Both full- and part-time faculty members were given copies of the research questionnaires and asked to complete them by their nursing program administrators.

Available Population Subjects

The respondents for this study came from an accessible population of all nursing faculty members teaching in baccalaureate and higher degree nursing programs in the Commonwealth of Virginia. Thus, an entire population of individuals who met the sampling criteria was included in the study (Polit and Hungler, 1995; Borg and Gall, 1989), because of that population's reasonable accessibility and small number, which

made such inclusion feasible. Ideally, all nurse educators in the United States would be included in the survey and would constitute a target population. The accessible population (those teaching in the Commonwealth of Virginia), being less representative than this target population, therefore reduces the generalizability of the study (Burns and Grove, 1993; Gall, Borg and Gall, 1996). Additionally, the study respondents were only those nursing faculty members who chose to complete and return the survey questionnaires. This procedure is similar to the process employed in the taking of a census. Nonresponses are a concern in any survey since this may lead to a biased final group of subjects. There is no evidence to suggest that bias existed in this study. Nevertheless, responses were tallied to determine whether all nursing programs were represented in the final count.

Selection Criteria

The criteria used to select nursing programs for inclusion in the research were as follows: The program had to (a) be located in the Commonwealth of Virginia, (b) be located in a four-year college or university; and (c) offer baccalaureate, masters, and/or doctoral degrees in nursing. The criteria used to select faculty members to participate in the study were as follows: (a) appointment to the faculty of one of the nursing programs selected for inclusion in the study and (b) classification as either a junior faculty member (having fewer than four years of teaching experience) or a senior faculty member (having four or more years of teaching experience) in one of the baccalaureate and higher degree nursing programs in the Commonwealth of Virginia.

Research Design

A descriptive correlational research design was used to conduct the study. Its intent was to explore relationships among variables rather than to ascertain cause and effect (Burns & Grove, 1993; Gall, Borg & Gall, 1996). Marriner (1981; see also Polit and Hungler, 1995) has pointed out that the advantages of a descriptive correlational design are that it (a) reveals to researchers what exists, (b) provides a means for discovering new meaning through facts that are found, (c) indicates the frequency with which something occurs, and (d) fosters the categorizing of information discovered. Burns and Grove (1993) similarly stressed that a descriptive correlational study provides an accurate account of characteristics of a particular individual, group, or situation. Thus, lacking the artificiality of a laboratory setting, the real-world findings of such a study may be more generalizable to other settings (Gall, Borg, and Gall, 1996; Polit, 1996; Polit and Hungler, 1995).

The decision to use a descriptive correlational design to study the retention of nurse educators in relation to job satisfaction and collegial support was made with such observations in mind. Use of such a design promised to facilitate the identification of the interrelationships between professional-demographic factors and nurse educators' perceptions of job satisfaction and collegial support and how these perceptions relate to the retention rates of nurse educators. The design also allowed the researcher to study the variables of retention of nurse educators in relation to job satisfaction and collegial support within the context of existing employment situations with no attempt to control or manipulate them.

Research Instrument

Data for this study were collected using a replicated questionnaire developed by Batiste-Beatty (1990/1991). The Batiste-Beatty questionnaire consists of three sections: Background Data, Job Satisfaction, and Survey of Collegial Support. Permission to use this instrument for the present study was obtained from the author (Appendix A). The standards that Batiste-Beatty used to establish validity and reliability in her study were also utilized for this research.

History of the Instrument's Development and Tests for Validity

Batiste-Beatty's section of the survey instrument related to job satisfaction was adapted from Marriner's (1975) Job Satisfaction and Mobility of Nursing Educators' Questionnaire. Marriner had established the content validity of this tool through a development procedure in which a group of nurse educators and graduate students were asked to look for ambiguous items and otherwise evaluate the makeup of the questionnaire. On the basis for their critique, items were added, deleted, or rearranged. A careful review of the literature on the concept of job satisfaction verified the construct validity of the Marriner instrument. Prior to the final revision, the instrument was pretested on full-time faculty members at the University of Rochester School of Nursing. And once again, based upon their suggestions, Marriner's instrument was revised. The 20 descriptive personal and demographic characteristics items were factor analyzed separately from the 52 items relating to the respondents' job characteristics. After a varimax rotation, each factor with a value of less than 1.0 was omitted. Data on reliability were not provided (Marriner & Craigie, 1977).

The development of the Batiste-Beatty tool, adapted from the Marriner

instrument just described, owed much to participants attending the first national conference of Afro-American Nurse Educators in Baccalaureate and Higher Degree Programs. A randomly selected group of 20 African American nurse educators ranked the importance of job satisfaction factors derived from Marriner's instrument. According to the frequency tabulations of the factors in each category, the top five job satisfaction factors—as prioritized by each respondent—were selected to comprise the Batiste-Beatty instrument. As in the case of the Marriner prototype, revisions were made to Batiste-Beatty's instrument on the basis of information obtained from this pilot study.

For the collegial communication section of the questionnaire, Batiste-Beatty used an adaptation of Beyer's (1981) Survey of Collegial Communication. Batiste-Beatty's adapted version of this instrument was also shaped at the first national conference of Afro-American Nurse Educators in Baccalaureate and Higher Degree Programs. As they had done with Mariner's Job Satisfaction and Mobility of Nursing Educators Questionnaire, 20 African American nurse educators prioritized by importance the factors listed in each category of Beyer's Survey of Collegial Communication; and each category was weighted on an independent scale. The frequency tabulation of these items became the composite of the measurement of collegial communication in the Batiste-Beatty study. The four most important items in each category were used. Based upon suggestions from the group selected at this conference, revisions were made on the instrument.

In Beyer's (1981) Survey of Collegial Communication, scores on the 40-item scale assessed the extent of interaction among faculty members regarding

communication, trust, freedom from threat, mutual support, friendliness, and encouragement. These six elements were measured separately according to their rated importance and actual and desired outcome. The importance rating provided the researchers with the degree to which participants valued these interpersonal behaviors. The actual outcome assessments provided descriptions of interpersonal communication among faculty colleagues as the participants perceived it to exist in actuality as opposed to what they desired it to be. (In her study, in contrast to Beyer's procedure of measuring the perceived importance and both the actual and desired outcomes, Batiste-Beaty measured only the *actual* outcomes.)

The Collegial Communication section of Batiste-Beaty's questionnaire consists of *two* identically worded 22-item sections, with one section seeking information on collegial communication in relation to job satisfaction and the other seeking information on collegial communication in relation to collegial support.

Batiste-Beaty established instrument validity by having three independent nursing faculty members evaluate items contained within the questionnaire. Each judge agreed that all instrument questions measured some aspect of interpersonal communication among nursing faculty colleagues. Their responses were then matched with the components, and each judge determined that there was a significant correlation between the two. Construct validity was established by pretesting the instrument for clarity and any examples of ambiguity by using ten faculty members who taught undergraduate students. Using Cronbach's Alpha, reliability estimates of the subscales of the Survey of Collegial Communication were found to be .98 actual process, .98 desired process, .97 importance, and .96 total Survey of Collegial Communication. The

Cronbach alpha normal has a range of values of between 0.00 and 1.00, with the higher values reflecting a higher degree of internal consistency (Polit and Hungler, 1995). The alpha level in Beyer's (1981) study ranged from .82 to .88, which sufficiently established reliability of the instrument.

The Use of the Batiste-Beaty Questionnaire for This Study

The Personal Data section of the questionnaire used in the study reported here was designed to collect professional-demographic information about the nursing faculty member respondents who were teaching in baccalaureate and higher degree programs in the Commonwealth of Virginia. Data related to the faculty professional-demographic characteristics of respondents were collected and correlated with the degree of importance respondents attached to *job satisfaction subscales*, which addressed nursing institution characteristics, salary and benefits, support services and facilities, regulation procedures, professional behavior, and organizational climate (see Appendix G). Likewise, data related to the faculty professional-demographic characteristics were correlated with respondents' perceptions of importance of *collegial support subscales*, which addressed such issues as confidence and trust, team effort toward goal achievement, open communication, mutual support, creativity, and freedom from threat (see Appendix H).

The Job Satisfaction section of the questionnaire is composed of 44 items, each with a Likert scale with a score ranging from 1 to 4 in descending order (4=very satisfied, 3=satisfied, 2=dissatisfied, 1= not satisfied, and N/A or left blank). The Job Satisfaction Scale can have scores ranging from 44 to 176, with higher scores indicating greater satisfaction. A Cronbach alpha was calculated to establish the scale's

reliability. Since previous research identified six subscales or dimensions of job satisfaction, a factor analysis was conducted to confirm the subscales. Any subscales identified by factor analysis had scale scores established by summing the ratings for each item in the manner described in the overall scale.

The Survey of Collegial Communication section of the questionnaire uses a four-point Likert scale (this factor or condition exists to a very considerable degree; a considerable degree; a slight degree, or does not exist). It consists of 22 items; thus the Collegial Communication Scale score can range between 22 and 88, with highest scores indicating perceived highest degree of existence of collegial support. Since previous research identified six subscales or dimensions of collegial communication (see Appendix H), a factor analysis was conducted to confirm the subscales. Any subscales identified by factor analysis had scale scores established by summing the ratings for each item in the manner described in the overall scale.

The four-point Likert scales for the job satisfaction and collegial communication sections were used to explicitly exclude the “uncertain” category in the final measurement tools. As Polit and Hungler (1995) have pointed out, a variety of opinions exist about the advisability of including the option of “undecided” as a response, with some authors suggesting that the inclusion of this makes the task less objectionable to people who are uncertain about their feelings or opinions on some issue, whereas others believe that the use of an “undecided” or “uncertain” option encourages the respondents to remain impartial. For this reason, Batiste-Beaty did not give the respondents an explicit “undecided” option, and this researcher has followed her lead.

Data Collection Procedures

Permission to conduct the study was obtained from each of the 12 nursing administrators of baccalaureate and higher degree Virginia nursing programs. This procedure was accomplished by the researcher's personally placing a telephone call to the administrators of each Virginia nursing program in the study population (Dean, Chair, or Director), to explain the purpose and significance of the research. During this conversation, permission was requested to distribute the survey instrument to each nursing educator faculty member in the respective programs. Once permission had been granted, survey instruments were mailed or hand delivered to the administrator who had given approval for conduct of the research (closeness to this researcher's home was the sole determinant for using hand delivery). In each situation, the administrator distributed the research instrument to faculty members. This approach was selected to overcome the difficulty of securing the individual names of faculty members in each the nursing programs and promoted the timely distribution of the questionnaires. The names of the program administrators were obtained from the 1996 list of the members of the Virginia Association of Colleges of Nursing and the Virginia Board of Nursing.

Survey instruments were specifically coded for each school of nursing and not for individual faculty members. Provision was allotted for a follow-up phone call to administrators (or their designees) if there was less than a 50% instrument return rate. This contingency procedure was built into the data collection process to assure the participation of the largest number of respondents. It never became necessary to implement this procedure, because the instrument return rate (from all 12 nursing programs combined) was greater than 50.9%

Data Analysis Procedures

Using the Statistical Package for the Social Sciences, PC Version (SPSS-PC), data collected were analyzed according to the specific research questions. However, to organize, reduce data and determine the reliability of the questionnaire-generated data, three preliminary statistical procedures were used: descriptive statistics, factor analysis, and Cronbach's alpha. The two primary statistical analyses performed to facilitate answering the 12 research questions of this study were Pearson's product-moment correlation procedure and analysis of variance (ANOVA).

Initially, the researcher computed descriptive statistics from the professional-demographic data (academic rank, tenure status, level of professional education, and age) obtained from each of the 12 groups of nurse educators. These descriptive statistics or "mathematical techniques for organizing and summarizing a set of numerical data" (Gall, Borg, and Gall, 1996, p. 175) were used to generate a picture of professional-demographic parameters so that individual and program patterns could be identified, thus revealing individual and program similarities and differences.

After this general picture emerged, the focus shifted to reduction rather than summarization. For this, factor analysis was used. As Kachigan (1986) has pointed out, factor analysis may be thought of in two ways—either as removing any duplication in information from a set of variables or as "groupings of similar variables" (p. 378).

To confirm the subscales and to determine the specific subscale items that correlated the most with the general subscale category, factor analysis was performed on the six job satisfaction subscales (nursing institution characteristics, salary and benefits, support services and facilities, regulation procedures, professional behavior,

and organizational climate) and the six collegial support subscales (confidence and trust, team effort toward goal achievement, open communication, mutual support, creativity, and freedom from threat). In addition, this analysis served to verify the results of previous factor analysis of the “Job Satisfaction” and “Survey of Collegial Communication” questionnaires, as described in the above section on the history of the instrument’s development. It also reduced the number of items under each subscale.

The final preliminary statistical analysis performed was a Cronbach’s alpha to determine the reliability of the now “reduced” six subscales for job satisfaction and the six subscales for collegial communication. The internal consistency of a research instrument is of paramount importance because it increases the probability that the respondents will remain focused on the area of inquiry that the instrument is designed to measure, and it eliminates the inclusion of unnecessary items that might result in respondent fatigue. Cronbach’s alpha tests the “homogeneity of all the items in the instrument” by examining “the extent to which all the items in the instrument measure the same construct” (Burns and Grove, 1993, pp. 341-342). Use of the Cronbach alpha coefficient indicated that this study’s survey instrument, “Perceptions of Nursing Educators in Baccalaureate and Higher Degree Programs on Job Satisfaction and Collegial Support” is internally consistent. The instrument had an overall Cronbach’s alpha coefficient of .9128 and .9726 respectively.

Data collected to answer research questions 1 and 2 were analyzed by Pearson r correlation:

1. What is the relationship between the retention of nurse educators in Virginia and their self-reported perceptions of job satisfaction?
2. What is the relationship between the retention of nurse educators in Virginia

and their self-reported perceptions of collegial support?

As “the most widely used correlation coefficient, designating the magnitude of relationship between two variables measured on at least an interval scale” (Polit and Hungler p. 650), the Pearson product-moment correlation was the most appropriate statistical technique to show both *how* the major variables of this study were associated and *to what degree*. A Pearson *r* coefficient of .80 or higher was the standard utilized to denote that a relationship exists between job satisfaction and retention. The same standard was utilized to denote that a relationship exists between collegial support and retention.

Data collected to answer research questions 3-10 were analyzed by analysis of variance (ANOVA):

3. Is there a difference in the perception of job satisfaction related to a faculty member's academic rank?
4. Is there a difference in the perception of job satisfaction related to a faculty member's tenure status?
5. Is there a difference in the perception of job satisfaction related to a faculty member's level of professional education?
6. Is there a difference in the perception of job satisfaction related to a faculty member's age?
7. Is there a difference in the perception of collegial support related to a faculty member's academic rank?
8. Is there a difference in the perception of collegial support related to a faculty member's tenure status?
9. Is there a difference in the perception of collegial support related to a faculty member's level of professional education?
10. Is there a difference in the perception of collegial support related to a faculty member's age?

Through the use of ANOVA, the means of the professional-demographic factors (academic rank, tenure status, level of professional education, and age) were compared for individual nursing faculty in regard to their perceptions of collegial support and job satisfaction. For this study, the level of significance was set at .05. Post hoc tests were performed when necessary. Academic rank had eight levels: Lecturer, Clinical Instructor, Assistant Instructor, Instructor, Assistant Professor, Associate Professor, Full Professor, and Professor Emeritus. Tenure status had three levels: Not Tenured (includes all not on tenure track), Tenure-Track Appointment, and Tenured. Professional level of education had four levels: Bachelor's, Master's, Doctorate of Education, and Doctorate of Philosophy. And age had eight levels: 25-30 years, 31-35 years, 36-40 years, 41-45 years, 46-50 years, 51-55 years, 56-60 years, and over age 60.

Data collected to answer research questions 11 and 12 were analyzed by Pearson r correlation and analysis of variance. The different correlation coefficients were compared.

11. Which elements of job satisfaction relate to retention?

12. Which elements of collegial support relate to retention?

For this study, those items under the six subscales for job satisfaction and collegial support were judged reliable with the lowest Cronbach alpha being .5910 for the nursing institution characteristics subscale of job satisfaction. Retention of nurse educators is indicated by the responses to two questions. One measure of retention is the number of years employed at the present nursing institution. The question measuring length of time at an institution has six responses: 0-3 years, 4-7 years, 8-11 years, 12-15 years, 16-19 years, and 20 or more years. The data analysis utilized these

six categories without collapsing them. A second question related to the retention variable is, “Are you currently considering leaving your present position?” The response to this question indicates intentions to remain in the faculty position. Respondents could answer “yes” or “no” with responses coded as a dummy variable for statistical analyses such as correlation and ANOVA. Retention is relevant to research questions 1, 2, 11, and 12.

Analysis of the data for research questions 1 and 2 employed two different statistics: a Pearson’s Product Moment Correlation and a one-way ANOVA for each of the collegiality and job satisfaction subscales. Answers to research questions 11 and 12 are based on a comparison of the results of the analyses performed for research questions 1 and 2. For example, if the correlation between retention and the collegial subscale “confidence and trust” were $+.72$ and the correlation between retention and “mutual support” were $-.33$, then the conclusion is that confidence and trust is more important to retention than is mutual support.

Research questions 3 through 10 data were analyzed using a one-way ANOVA. For each of the collegiality and job satisfaction subscales, means were computed and compared for the categories corresponding to the predictor variable. Academic rank consisted of eight categories: Lecturer, Clinical Instructor, Assistant Instructor, Instructor, Assistant Professor, Associate Professor, Full Professor, and Professor Emeritus. Tenure status was indicated by three categories: Tenured, On the Tenure Track (though not yet tenured), and Not on the Tenure Track. Respondents were placed into four categories according to their highest degree: Bachelor’s, Master’s, Doctor of Education, and Doctor of Philosophy. Age was measured by eight categories: 25-30,

Education, and Doctor of Philosophy. Age was measured by eight categories: 25-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, and over 60 years of age.

The findings yielded by the data analysis are presented in the following chapter.

Summary

This chapter presented the methodology that was used to conduct this study and a description of the study's design. The identification of the population and selection of the sample was discussed, along with the independent and dependent variables and their operational definitions. Finally, the statistical procedures used in analyzing the data were introduced.

CHAPTER IV

DATA ANALYSIS AND FINDINGS

This chapter is organized around the statistical procedures used in this research (descriptive statistics, factor analysis, Cronbach's alpha, Pearson's product-moment correlation, and analysis of variance) and the data that emerged from each.

Descriptive Statistics.

Of the 350 survey instruments distributed, 178 (50.9%) were returned. Two (1.1%) of the 178 returned survey instruments had to be discarded, however, because of non-responsiveness to more than 50% of the items. (Background data was analyzed for these two respondents nevertheless.) Thus, the data of 176 respondents were analyzed from the original population of 350. But even from this group, there were instances in which a respondent did not respond to a particular survey item. This accounts for the variation in number of respondents in some of the tables.

Background data.

As Table 1 shows, the respondents were not very diverse according to gender and race. An analysis of the gender distribution revealed that 173 (98.9%) were female and 2 (1.1%) were male. The overwhelming majority of respondents (137 [77.8%]) were Anglo American. Among the remaining respondents, 34 reported their racial/ethnic identification as African American (19.3%), 3 as Asian American (1.7%) and 2 as Hispanic (1.1%). (See Table 1.)

Table 1

Descriptive Statistics for Nurse Educators

Personal data: Frequency and Percentage		
Sex	N (175)^a	Percent^b
Female	173	98.9
Male	2	1.1
Ethnicity	N (176)^a	Percent^b
African American	34	19.3
Anglo American	137	77.8
Asian American	3	1.7
Hispanic	2	1.1
Annual salary	N (174)^a	Percent^b
Under \$10,000	5	2.9
\$10,000 - \$14,999	6	3.4
\$15,000 - \$19,000	1	0.6
\$20,000 - \$24,000	2	1.1
\$25,000 - \$29,000	15	8.6
\$30,000 - \$34,999	13	7.5
\$35,000 - \$39,999	29	16.7
\$40,000 - \$44,999	32	18.4
\$45,000 - \$49,999	18	10.3
\$50,000 or over	53	30.5
Location of program	N (178)^a	Percent^b
College	11	6.2
University	167	93.8
Employment status	N (178)^a	Percent^b
Full-time	148	83.1
Part-time	21	11.8
Adjunct	9	5.1
Years Employed at Present Institution	N (178)^a	Percent^b
0-3	55	30.9
4-7	59	33.1
8-11	27	15.2
12-15	11	6.2
16-19	14	7.9
20 or more	12	6.7

^aFrequencies may not sum to 178 because of missing data.^bPercent may not sum to 100 because of rounding.

Professional-Demographic Variables

The four professional-demographic variables examined in this study were academic rank, tenure status, level of professional education, and age (see Table 2).

Academic rank. The descriptive analysis revealed that slightly more than one-fifth of the respondents were at or below the rank of assistant professor. However, the largest concentration of nursing program faculty members—68.5%—fell within a broad band made up of three academic ranks: instructor, assistant professor, and associate professor. Another band spanning the categories of full professor and professor emeritus consisted of 19 faculty members (10.7%).

Tenure Status. Nearly three-fourths of faculty members were not tenured, although slightly more than one out of five (20.9%) of the respondents was on a tenure track. Forty-seven respondents (26.6%) had tenure.

Level of professional education. The number of nursing faculty at the lower professional education levels exceeded the number at the higher levels by 31. The 104 nursing faculty with academic degrees at or below the master's degree accounted for 58.8% of the total nursing faculty in the study. This left 73 (41.2%) of the nursing faculty with terminal professional degrees—either an Ed.D. or a Ph.D.

Age. In the original, the survey instrument had eight categories for age (see Table 2). However, the descriptive analysis generated small numbers in three of the eight age categories (ages 25-30, 31-35, and over 60). The pattern that emerged showed that the respondents fell into the following broader categories of ranges in age: 25-40 years; 41-55 years; and age 56 and older. As Table 2 shows, two-thirds of nursing faculty fell within the age range of 41-55. Those nursing faculty falling within

the age range of 25-40 made up the next largest group of nursing faculty (18.5 %), with the remaining group (15.2%) comprising nursing faculty in the age range of 56 or older.

Thus, it can be seen that the lower and upper age groupings of nursing faculty are about evenly divided, with the middle range by far the largest (see Table 2).

Table 2

Frequency and Percentage of Professional-Demographic Factors

Academic rank	N (178)^a	Percent^b
Lecturer	9	5.10
Clinical instructor	25	14.00
Assistant instructor	3	1.70
Instructor	26	14.60
Assistant professor	58	32.60
Associate professor	38	21.30
Full professor	17	9.60
Professor emeritus	2	1.10

Tenure status	N (178)^a	Percent^b
Not tenure track	94	53.1
On tenure track	37	20.9
Has tenure	47	26.6

Level of Professional Education	N (177)^a	Percent^b
Bachelor	6	3.40
Master	98	55.40
Ed.D	13	7.30
Ph.D.	60	33.90

Age	N (178)^a	Percent^b
25 - 30	2	1.10
31 - 35	9	5.10
36 - 40	22	12.40
41 - 45	47	26.40
46 - 50	37	20.80
51 - 55	34	19.10
56 - 60	20	11.20
Over 60	7	3.90

^aFrequencies may not sum to 178 because of missing data.

^bPercent may not sum to 100 because of rounding.

Job Satisfaction

There are 44 items on the "Job Satisfaction Questionnaire." Each item has four possible responses (Very Dissatisfied, Dissatisfied, Satisfied, and Very Satisfied).

There were 178 respondents who answered each of the 44 items.. The largest response rate (percentage) of the four possible responses is as follows: For the 44 items on the questionnaire, most responses fell in the "Satisfied" category. Only 1 item had the largest response rate in the "Very Satisfied" category (41.0%). Four items had the largest response rate in the "Very Dissatisfied" category. (See Appendix C.)

Collegial Support

There are 22 items on the "Survey of Collegial Communication". Each item has four possible responses ("Very Considerable Degree"; "Considerable Degree"; "Slight Degree"; and "Does Not Exist"). Nineteen items had the largest response rate in the "Considerable Degree" category, suggesting that faculty obtain support for most issues. (See Appendix D).

Inferential Statistics

Factor Analysis

Questions 11 and 12 concern the specific aspects of job satisfaction and collegial support related to retention. Factor analysis confirmed the subscales which had been identified by previous research. The subscale scores were then correlated with the retention measures. The absolute values of the correlation coefficients were compared to determine which had the greater influence on retention.

Cronbach's Alpha

The analysis does not relate retention to an individual item but to the scales and

subscales comprised of a number of items. Cronbach's alpha, used to measure reliability of the scales and subscales, indicates how the overall reliability would be influenced if an item were omitted. Items are included if they are related to the other items in the scale/subscale. Cronbach's alpha was run for the Job Satisfaction Questionnaire (.9128) and the Survey of Collegial Communication (.9726). These were the two scales of the survey instrument, "Perceptions of Nursing Educators in Baccalaureate and Higher Degree Programs on Job Satisfaction and Collegial Support" (see Tables 3 and 4).

Tables 3 and 4 also present the reliability coefficients for the several subscales of job satisfaction and collegial support. All of the coefficients are acceptable, indicating internal consistency of the items comprising the scales and subscales; that is, the items are correlated with one another as well as the scale total.

Table 3

Cronbach's Alpha for Job Satisfaction Scale and Subscales

Job satisfaction scale	9128
<hr/>	
Subscales	Cronbach's alpha
<hr/>	
Nursing institution characteristics	5910
Salary and benefits	7205
Support services and facilities	6490
Regulation procedures	7801
Professional behavior	7897
Organizational climate	6438
<hr/>	

Table 4

Cronbach's Alpha for Collegial Support Scale and Subscales

Collegial support scale	.9726
Subscales	Cronbach's alpha
Confidence and trust	.8426
Team effort toward goal achievement	.8787
Open communication	.8451
Mutual support	.8436
Creativity	.8345
Freedom from threat	.9273

Analysis of Variance and Pearson r Correlation

Two analyses (ANOVA and Pearson r) were performed to facilitate answering the 12 research questions of this study. These two statistical procedures have been classified under one section because they were used in tandem to answer research questions 1, 2, 11, and 12. Each statistical procedure is identified at the stage in which it was used. An alpha level of .05 was used for all statistical tests.

Research Findings**Directional Hypotheses**

1. *The greater the perceived job satisfaction among faculty in baccalaureate and higher degree nursing programs in Virginia, the greater will be the faculty retention.* This directional hypothesis was accepted.

Hypothesis 1 had two operational definitions for retention: (a) "years at present institution" and (b) a "yes" answer to the question: "Are you currently considering

institution" and (b) a "yes" answer to the question: "Are you currently considering leaving your present position?"

The relationship between job satisfaction and retention (operationalized as "years at present institution") of faculty in baccalaureate and higher degree nursing programs in Virginia was significant, positive, and weak ($r = 0.2874$) (see Table 5). This result was influenced by the preponderance of the possible 44 item responses having ratings of "Satisfied" on a 4-point Likert scale ("Very Satisfied," "Satisfied," "Dissatisfied," and "Very Dissatisfied"). These "Satisfied" ratings never exceeded 66.9%. Also, the influence of 1 "Dissatisfied" and 4 "Very Dissatisfied" item responses assisted in lowering the Pearson r coefficient. The fact that there was only 1 "Very Satisfied" item did not help in increasing the value of the Pearson r coefficient. The above correlation coefficient suggests that as job satisfaction increases, so does retention. However, there is a degree of marginality associated with this increase in retention.

Table 5

Retention Operationalized as "Years at Present Institution": Correlated with Job Satisfaction Scale and Collegial Support Scale

Faculty members (N = 176)	
Job satisfaction	2874*
Collegial support	0577

* $p < .001$

“yes” answer to the question: “Are you currently considering leaving your present position?”) was significant, negative, and weak ($r = -.2342$) (see Table 6). This suggests that as job satisfaction increases, there is a decrease in the probability of a faculty member’s leaving his or her current institution.

Table 6

**Retention Operationalized as “Faculty Members Planning to Leave Institution”:
Correlated with Job Satisfaction Scale and Collegial Support Scale**

Faculty members (N = 176)	
Job satisfaction	-.2342 *
Collegial support	-.2371 *
* $p < .001$	

2. *The greater the perceived collegial support among faculty in baccalaureate and higher degree nursing programs in Virginia, the greater will be the faculty retention.* No decision can be made about this hypothesis since data from one test supported the hypothesis and data from the other test did not.

Retention was operationalized in the two ways described under Hypothesis 1. The relationship between collegial support and retention of faculty in baccalaureate and higher degree nursing programs in Virginia was rejected when retention was operationalized as “years at present institution.” A close examination of the 22 items

operationalized as “years at present institution.” A close examination of the 22 items revealed that none were “Very Considerable Degree.” This fact contributed to the lack of statistical significance when collegial support was correlated with retention (see Table 5).

However, when retention was operationalized as a “yes” answer to the question: “Are you currently considering leaving your present position?” there was a significant weak negative correlation ($r = -.2371$). This suggests that as the perception of collegial support increases, there is a decrease in the probability of a faculty member’s leaving her or his current institution (see Table 6).

3. *Perceived job satisfaction will vary on the basis of four professional-demographic variables: academic rank, tenure status, level of professional education, and age.* This hypothesis was supported in part.

Perceived job satisfaction did vary on the basis of academic rank, tenure status, and level of professional education. It did not vary on the basis of age. Specifics are discussed below under research questions 3-6 on pages 61-64.

4. *Perceived collegial support will vary on the basis of four professional-demographic variables: academic rank, tenure status, level of professional education, and age.* This hypothesis was supported in part.

Collegial support did vary on the basis of academic rank. However, it did not vary on the basis of tenure status, level of professional education, or age. Specifics are discussed below under research questions 7-10 on pages 64-65.

Research Questions

1. *What is the relationship between the retention of nurse educators, in Virginia, and their self-reported perceptions of job satisfaction?* First, one-way ANOVAs were performed for retention and the job satisfaction and collegial support subscales. Then the two scales were correlated, using Pearson r coefficients, with respondents' number of years at present institutions. There was a significant positive, although weak, correlation ($r = 0.2874$) between number of years at present institution and job satisfaction. This suggests that as the number of years at an institution increases for nurse educators in Virginia, the likelihood of their staying at their present institution also increases. However, this occurrence is far from certain. (See Table 5).

When retention was operationalized as a "yes" answer to the question, "Are you currently considering leaving your present position?" there was a weak significant negative correlation with job satisfaction ($r = -.2342$). This suggests that as job satisfaction increases, there is a decrease in the probability of a faculty member's leaving her or his current institution. (see Table 6).

2. *What is the relationship between the retention of nurse educators, in Virginia, and their self-reported perceptions of collegial support?* The relationship between the retention of nurse educators in Virginia and their self-reported perceptions of collegial support was not significant when retention was operationalized as "years at present institution." There was a slight positive correlation between retention and collegial support ($r = .0577$ and $p = .224$). This suggests that some elements within the collegial support subscale are not correlated with retention at a level that is significant. The conclusion to be drawn from the above correlation coefficient is that as collegial

support increases, retention increases only slightly. However, the correlation between support and retention is not significant (see Table 5).

When retention was operationalized as a “yes” answer to the question, “Are you currently considering leaving your present position?” there was a significant weak negative correlation with collegial support ($r = -.2371$). This suggests that as collegial support increases, the probability of a faculty member’s leaving her or his current institution decreases (see Table 6).

3. *Is there a difference in the perception of job satisfaction related to a faculty member’s academic rank?* The effect of academic rank on perception of job satisfaction was statistically significant, F ratio= 8.72, $df = 4, 177$, $p = .0000$ (see Table 7). This indicates that the perception of job satisfaction is firmly entrenched in the minds of faculty members based on their academic rank. Specifically, full professors had the strongest perception of job satisfaction ($M = 126.53$). Associate professors had the next strongest perception of job satisfaction ($M = 118.00$). Instructors had the next strongest perception of job satisfaction ($M = 110.50$). Assistant professors and lecturers, clinical instructors, and assistant instructors were the least satisfied.

Table 7

Analysis of Variance Summaries of Job Satisfaction Scores According to Academic Rank

Academic rank	Mean score
Faculty members ($N = 177$)	
Lecturer, clinical instructor, and assistant instructor	96.51
Instructor	110.50 *
Assistant professor	105.45 *
Associate professor	118.00 *
Full professor, Professor emeritus	126.53 *

* $p < .001$

4. *Is there a difference in the perception of job satisfaction related to a faculty member's tenure status?* The effect of tenure status on the perception of job satisfaction was statistically significant, $F = 11.49$, $df = 2, 175$, $p = .0000$ (see Table 8). Tenured faculty members had the highest level of job satisfaction ($M = 122.15$). The other categories of faculty differed significantly from the tenured faculty in terms of job satisfaction. Non-tenured faculty members who were on a tenure track had a perception of job satisfaction of $M = 107.73$. And faculty members *not* on a tenure track had the least perceived job satisfaction ($M = 103.94$). This result is consistent with the level of commitment that the individual schools of nursing have made to each faculty member category: Tenured (strong commitment), not-tenured but on tenure track (strong contingent commitment), and neither tenured nor on tenure track (no commitment). Therefore, based on tenure, the stronger and more certain the commitment of the nursing institution, the stronger is the perception of job satisfaction of faculty members (see Table 8)

Table 8**Analysis of Variance Summaries of Job Satisfaction According to Tenure Status**

Tenure status	Mean score
Faculty members (<i>N</i> = 175)	
Not tenured, not on tenure track	103.93 *
Not tenured, but on tenure track	107.73 *
Tenured	122.15

**p* < .001

5. *Is there a difference in the perception of job satisfaction related to a faculty member's level of professional education?* There was a significant difference in the perception of job satisfaction related to a faculty member's level of professional education. $F = 12.04$, $df=2, 176$, $p = .0000$. This difference is extremely strong as indicated by a *p* value of .0000. This indicates that the perception of job satisfaction is firmly entrenched in the minds of faculty members based on their level of professional education. Specifically terminal degree faculty had the highest job satisfaction. Ed.D.s had the strongest job satisfaction ($M = 125.00$), and PhD.s had the next strongest job satisfaction ($M = 117.10$). Faculty members below the terminal degree level have the lowest mean scores in regard to job satisfaction and differ significantly from faculty with terminal degrees (see Table 9). This indicates that the terminal degree is of great importance in contributing to job satisfaction among nursing faculty.

Table 9

Analysis of Variance Summaries of Job Satisfaction According to Level of Professional Education

Level of education	Mean score
Faculty members ($N = 176$)	
Bachelor's and master's degrees	102.85
Doctor of education degree	125.00*
Doctor of philosophy degree	117.10*

* $p < .001$

6. *Is there a difference in the perception of job satisfaction related to a faculty member's age?* There was no significant difference in the perception of job satisfaction related to a faculty member's age, $F = 2.18$, $df = 4, 177$, $p = .0729$.

7. *Is there a difference in the perception of collegial support related to a faculty member's academic rank?* There was a significant difference in the perception of collegial support related to a faculty member's academic rank, $F = 2.52$, $df = 4, 175$, $p = .0428$. Associate professors had the strongest perception of collegial support ($M = 61.61$). Full professors had the next strongest perception of collegial support ($M = 60.32$). These two groups differed significantly from the other faculty ranks in terms of collegial support. Thus, there is a tendency for faculty members with the higher academic ranks to have a more positive perception of collegial support (see Table 10).

Table 10

Analysis of Variance Summaries of Collegial Support According to Academic Rank

Academic rank	Mean score
Faculty members ($N = 175$)	
Lecturer	55.09
Clinical instructor	55.09
Assistant instructor	59.03
Instructor	55.09
Assistant professor	55.09
Associate professor	61.61 *
Full professor, Professor emeritus	60.32 *

* $p < .001$

8. *Is there a difference in the perception of collegial support related to a faculty member's tenure status?* There were no significant differences in perceived collegial support for tenure status. $F = 1.12$, $df = 2, 173$, $p = .3271$.

9. *Is there a difference in the perception of collegial support related to a faculty member's level of professional education?* There were no significant differences in the perception of collegial support related to a faculty member's level of professional education, $F = .8411$, $df = 2, 174$, $p = .4330$.

10. *Is there a difference in the perception of collegial support related to a faculty member's age?* There were no significant differences in the perception of collegial support related to a faculty member's age, $F = .6394$, $df = 4, 175$, $p = .6351$.

11. *Which elements of job satisfaction relate to retention?* Retention was operationalized two ways (a) as "years at present institution"; and (b) as a "yes" answer

to the question: "Are you currently considering leaving your present position?"

With retention operationalized as "years at present institution," the bivariate correlations between retention and job satisfaction subscales are presented in descending order:

- (a) Regulation Procedures ($r = .3435$)
- (b) Organizational Climate ($r = .2408$).
- (c) Salary and Benefits ($r = .2281$)
- (d) Support Services and Facilities ($r = .2138$)
- (e) Nursing Institution Characteristics ($r = .1721$)
- (f) Professional Behavior ($r = .0912$)

The strongest correlation, "Regulation Procedures," suggests that the items that comprise this subscale (Academic Ranking, Sabbatical Policies, Consulting Activities, Reappointment Policies, Leaves of Absence, and Tenure) collectively exert more influence on retention than any other subscale. However, this correlation coefficient does not indicate which items under the "Regulation Procedures" rubric exert the most or least influence; nor does it mean that some other item under another job satisfaction subscale (e.g., "Salary and Benefits," "Professional Behavior," etc.) may not exert more influence than any one item under the "Regulation Procedures" subscale.

Three additional Job Satisfaction Subscales exerted weak influence on retention: Organizational Climate ($r = .2408$), Salary and Benefits ($r = .2281$), and Support Services and Facilities ($r = .2138$). The close similarity in their coefficient values suggests that these three items exert equal, or near equal, influence on retention. The final significant Job Satisfaction Subscales, namely, Nursing Institution Characteristics

($r = .1721$) and Professional Behavior ($r = .0912$), suggest minimal influence on retention. The influence of the Regulation Procedures Subscale on remaining at an institution was further indicated by a multiple regression analysis. When the six subscales were introduced by a stepwise procedure, only the Regulation Procedures Subscale was retained in the equation.

Retention based on intention to leave an institution is an inverse scale in the sense that a low score indicates higher retention. A “yes” answer to the question, “Are you considering leaving your present position?” was coded as 1, and a “no” answer was coded as 0. With retention operationalized as a “yes” response to the question, “Are you currently considering leaving your present position?” the following job satisfaction subscales correlated with retention as follows in descending order:

- (a) Salary and Benefits ($r = -.2309$)
- (b) Nursing Institution Characteristics ($r = -.2274$)
- (c) Professional Behavior ($r = -.2252$).
- (d) Organizational Climate ($r = -.2103$)
- (e) Support Services and Facilities ($r = -.1259$)
- (f) Regulation Procedures ($r = -.1172$)

All the significant correlation coefficients were negative, and four of the six (Salary and Benefits, Nursing Institution Characteristics, Professional Behavior, and Organizational Climate) had similar coefficient values. The negative sign indicates an inverse relationship with retention, that is, as satisfaction increases, the intent to leave decreases. The closeness of their coefficient values suggests that none exerts more influence than the other. The remaining subscale items, Support Services and Facilities

and Regulation Procedures, showed low correlations and probably have little impact on whether or not a faculty member plans to leave an institution (See Table 11.).

A multiple correlation analysis supported the influence of the Salary and Benefits subscale on intent to leave when it was the only subscale which remained in the equation using a stepwise procedure.

12. *Which elements of collegial support relate to retention?* Retention was operationalized two ways as in Research Question 11 above.

With retention operationalized as “years at present institution,” only one subscale correlation was significant, Team Effort toward Goal Achievement ($r = .1469$); and its very low coefficient value suggests that this subscale exerts only a small amount of influence on retention. The remaining five subscales have even lower correlation coefficients with retention, and none are statistically significant (see Table 11). The subscales are presented in descending order of their relationship to retention:

- (a) Team Effort toward Goal Achievement ($r = .1469$)
- (b) Mutual Support ($r = .0616$)
- (c) Creativity ($r = .0597$)
- (d) Freedom from Threat ($r = .0515$)
- (e) Trust ($r = .0158$)
- (f) Open Communication ($r = -.0099$)

The Team Effort Subscale was the only variable retained in a multiple regression analysis with a stepwise procedure.

Table 11

Correlation of Retention with Job Satisfaction Subscales and Collegial Support Subscales

<i>Correlations</i>	<u>Job Satisfaction Subscales^a</u>					
	<i>NIC</i>	<i>S&B</i>	<i>SS&F</i>	<i>RP</i>	<i>PB</i>	<i>OrC</i>
Retention (years at present institution)	.1721*	.2281**	.2138**	.3435***	.0912	.2408*
Retention (considering leaving present position)	-.2274**	-.2309**	-.1259*	-.1172	-.2252**	-.2103**
<i>Correlations</i>	<u>Collegial Support Subscales^b</u>					
	<i>C&T</i>	<i>TEGA</i>	<i>OpC</i>	<i>MS</i>	<i>C</i>	<i>FFT</i>
Retention (years at present institution)	.0158	.1469	-.0099	.0616	.0597	.0515
Retention (considering leaving present position)	-.2484***	-.2460***	-.2340**	-.2220**	-.1552*	-.2312**

Note. This table utilizes the two operationalizations of retention. Detailed listings of the components making up the job satisfaction and collegial support subscales are presented in Appendixes G and H respectively

^a *NIC* = Nursing Institution Characteristics, *S&B* = Salary and Benefits, *SS&F* = Support Services and Facilities, *RP* = Regulation Procedures, *PB* = Professional Behavior, *OrC* = Organizational Climate

^b *C&T* = Confidence and Trust, *TEGA* = Team Effort Toward Goal Achievement, *OpC* = Open Communication, *MS* = Mutual Support, *C* = Creativity, *FFT* = Freedom from Threat

* $p < .05$

** $p < .01$

*** $p < .001$

With retention operationalized as a “yes” response to the question, “Are you currently considering leaving your present position?” the following collegial support subscale correlations were significant at a .05 level or less. They are presented in descending order of the strength of the relationship.

- (a) Confidence and trust ($r = -.2484$)
- (b) Team effort toward goal achievement ($r = -.2460$)
- (c) Open communication ($r = -.2340$).
- (d) Mutual support ($r = -.2220$)
- (e) Freedom from threat ($r = -.2312$)
- (f) Creativity ($r = -.1552$)

Thus, all of these subscale correlations were significant and negative. Five ranged from -.2312 to -.2484. The low correlation coefficient value suggests that the influence exerted by these five collegial support subscales is marginal. Also, as the negative sign indicates, the relationship is inverse in nature, that is, as collegial support increases, the intent to leave decreases (see Table 11).

Summary

Generally, while the hypotheses were supported by the data, there were some exceptions. The major finding was that job satisfaction appears to be more relevant to retention of nursing faculty than does collegial support.

CHAPTER V

SUMMARY, CONCLUSIONS, AND FUTURE IMPLICATIONS

Profound changes in health care and its delivery have occurred in the United States during the 1990s. These changes impact nursing educators no less than others in the health professions, and the role of these educators may be expected to take on added importance as those whose responsibility it is to prepare a workforce that is essential for the changing health delivery system. This study speaks to the need to assure that an adequate supply of nurse educators will be available.

Overview: The Changing Health Care Scene

The trend is increasingly toward more primary and preventive care in community-based sites rather than in hospitals. This trend has led to an increased demand for nurse practitioners and nurses with advanced clinical skills—nurses prepared to meet the health needs of patients in their homes, in maternal-child health centers, homeless shelters, community-based health care centers, health maintenance organizations (HMOs), and for long-term care. Hospital admissions are down and lengths of stay are shorter. Changes in employment patterns in hospitals reflect this trend, with numbers of registered nurses employed in hospital outpatient departments having shown a major increase, while inpatient nurse employment opportunities have shown only a small increase (AACN, 1997b).

Many hospitals have downsized to cut costs, which has meant fewer nurses at all levels of inpatient care, a greater patient load per nurse, and increased responsibilities. A national survey of more than 7,500 nurses throughout the United States found that productivity goals in many hospitals have demanded that nurses do

more work in less time—the “speed-up” phenomenon—which has resulted in both fatigue and discontent among many nurses, as well as concern about quality patient care (Shindul-Rothschild, Berry, & Long-Middleton, 1996).

Anxiety about employment opportunities may have contributed to some degree to the decline in student enrollment in entry-level baccalaureate programs. However, much of the decline in both entry-level baccalaureate and master’s degree programs has been attributed to budget cuts and limited resources, which in turn have affected the supply of faculty by restricting the number of full-time faculty positions. In the fall of 1995, over one-fourth (27%) of nursing schools responding to an American Association of Nurses survey “cited too few faculty as the chief reason for not accepting all qualified applicants to master’s-degree nursing programs” (AACN, 1997b, p. 2). Enrollments of doctoral students are also lower than necessary to provide a pool from which future nurse educators will come.

Nursing programs need to be able to attract new faculty and *retain present faculty* if they are to (a) provide the training necessary for nurses who will work in the changing health care system of the 21st century and (b) prepare those women and men who will be the future nurse educators.

Job Satisfaction and Nurse Educator Retention

The first hypothesis of this study was supported. The data showed that as perceived job satisfaction increases, the likelihood of a faculty member’s leaving his or her present position decreases.

Developing and maintaining a high-quality faculty does not happen by accident. Sensitivity to the issues that relate to job satisfaction is important for policy-makers and administrators in creating optimal working conditions and assuring that quality faculty members will remain. Such a faculty in turn influences the quality of future faculty members. Thus, not only in nursing but in all higher education institutions, effective leadership requires awareness and enhancement of factors which motivate faculty to work at peak levels of effectiveness and efficiency while at the same time finding satisfaction in the work they do.

As Herzberg, Mausner, & Snyder (1959) have emphasized, for most men and women, work is one of the most absorbing aspects of life "It fills the greater part of the waking day. For the fortunate, it is the source of great satisfaction; for many others, it is the cause of grief" (p. 3). Interest in this topic led Herzberg to develop his theory of job satisfaction (Herzberg, 1966, Herzberg, Mausner, and Snyder, 1959). In that theory, he stressed the importance of an individual's intrinsic needs, those nonfinancial motivators that provide the individual with a sense of personal fulfillment in his or her occupation. Although his theory was developed through research in the industrial sector, the concept of job satisfaction is applicable to nurse educators as well, as the findings of the present study show.

In the present study, not only was there a clear association between retention and job satisfaction, but job satisfaction was found to vary on the basis of three of the four professional-demographic factors listed in Hypothesis 3. Analysis of variance on the mean scores showed that the test scores varied significantly on

academic rank, tenure status, and level of professional education. This pattern did not hold true for age.

Academic Rank and Job Satisfaction

There was a significant difference in the perception of job satisfaction in relation to a faculty member's academic rank. Full professors had the strongest perception of job satisfaction ($M = 126.53$); associate professors had the next strongest perception ($M = 118.00$); and instructors had the third strongest perception of job satisfaction ($M = 110.50$). The strong perception of job satisfaction found among full professors and associate professors may be related to several factors in their situation. Full professors and associate professors are more likely to be full-time, tenured (or on a tenure track), have more years of teaching and research behind them, have gained expertise and recognition for professional achievement, hold administrative positions (such as dean, department chair, head of a special program, and the like) and have other duties and responsibilities which allow them more autonomy, security, and freedom from the fear of job loss.

Interestingly, those at the assistant professor rank were fourth highest in mean score for job satisfaction. It is possible that this finding indicates the degree of pressure felt by assistant professors as they are expected to "prove themselves," balance research and teaching, comply with "publish or perish" expectations, and otherwise work to meet the job requirements for achieving tenure.

Instructors, on the other hand, were higher in job satisfaction than were assistant professors, and were just behind full professors and associate professors. This may relate to those at the instructor rank having different expectations

regarding promotion, tenure, requirements for professional education and advanced degrees, and employment status. Many nurse educators employed at the instructor level are part-time and can pursue other employment and career opportunities. This allows them more flexible working hours and less responsibility in program activities such as committee work, student advising, and tenure- and promotion-related scholarly activities, such as research, grant writing, and publishing.

Tenure Status and Job Satisfaction

Wilke (1979) called attention to the unique situation of higher education personnel and the double classification system in effect. He observed that "professors are not only ranked according to a general system of merit as professors, associate professors, and assistant professors, but they are also ranked as tenured and nontenured," with tenure, if it is to be awarded, generally being awarded in the seventh year of demonstrated achievement as a faculty member. "Tenure does not provide an absolute job guarantee," he wrote, "but it does protect the faculty member from arbitrary dismissal" (p. 7).

The issue of tenure is much discussed in higher education circles today (Finkin, 1996; Tiemey & Bensimon, 1996), and it was found to be a major factor in the perception of job satisfaction among the nursing educators in this study. Tenured faculty were the only faculty members who had a significant perception of job satisfaction ($M = 122.15$). Faculty members not on a tenure track had the least perceived job satisfaction ($M = 103.94$). Those non-tenured faculty members who were on a tenure track fell in between, with a mean of 107.73.

Twenty-six percent of the nursing educators in this study were tenured, and another 21% had tenure-track appointments, but more than half the respondents were not tenured. The lower job satisfaction score of non-tenured faculty could reflect their knowledge of the lack of institutional commitment to their continuous employment. Thus, they are lacking the job security of tenured faculty, and with job vulnerability comes lowered satisfaction. Of the total respondents, 37.6% reported being "very dissatisfied" with tenure, and 41% reported being "very dissatisfied" with their perceived security and freedom from the threat of job loss.

The higher job satisfaction reported by tenured faculty is likely related to their job security, higher salary and employment benefits, consulting activities, and sabbatical policies. Tenured faculty may also believe they have greater career options.

Job Satisfaction and Level of Professional Education

The data revealed that nurse educators' perception of job satisfaction was significantly related to their level of professional education at the doctoral level ($p = .000$). Those with Doctor of Education (Ed.D.) degrees were more satisfied ($M = 125$) than were those with Doctor of Philosophy (Ph.D.) degrees ($M = 117.10$). All faculty below these terminal degrees did not have significant mean scores in regard to job satisfaction.

The results thus indicate that the level of attained degree is significantly associated with the level of perceived job satisfaction among faculty in baccalaureate and higher degree nursing programs. It is an important credential for hiring, and the presence or absence of a doctorate is a significant factor in academic

retention and promotion—although consideration may be given at the time of employment for faculty with other desired expertise to acquire or complete the terminal degree within a designated time limit.

This researcher suggests that nurse educators with doctorate degrees are more satisfied as a result of the job rewards and fringe benefits, including greater career leadership options, higher salaries, promotion and tenure achievements, greater autonomy, and opportunities to actively pursue professional interests and creative goals. In contrast, faculty with academic preparation below the doctoral level may find the extent of their job satisfaction is tied to their salary and opportunities for promotion, tenure, and retention. Opportunities in these categories would be limited in the absence of a doctorate and so would be their level of job satisfaction.

Age and Job Satisfaction

The data from this study did not show a significant difference in the perception of job satisfaction as related to a nursing faculty member's age—although age was moving in the direction of significance ($p = .0729$). The finding that age did not explain a significant proportion of variance in job satisfaction may indicate that a realistic concept of academic expectations and more effective coping skills have been developed by older faculty. Younger faculty are more likely to be part-time or junior faculty with fewer than four years at the present institution. In the opinion of this researcher, the degree and other requirements for promotion, tenure, and full-time employment contribute to a shorter length of faculty appointments and more mobility among these young faculty members, with less

involvement with those policies and practices of the institution which contribute to job satisfaction. Also, since graduate students—especially doctoral students—in nursing programs tend to pursue their advanced degree studies at an older age (AACN 1996, NLN, 1996), it may be that the ages of part-time, junior, and senior faculty are not vastly different from one another. As Table 2 in chapter 4 shows, the respondents tended to cluster in the middle range of ages rather than being at either the younger extreme (40 years or under) or older extreme (56 years of age or older). Two-thirds of the nursing educators in the study were in the 41 to 55 years of age range. Therefore, the similarity in age of respondents may explain why job satisfaction did not vary by age in this study. Previous studies have differed on findings regarding the relationship of age to job satisfaction, with some finding the association significant (Batiste-Beaty, 1990,1991; Fain, 1987; Marriner and Craigie, 1977), and others supporting the findings of this study (Christian, 1986).

Elements of Job Satisfaction Related to Retention

Because job satisfaction has been shown to relate to retention, it is useful to look at *what elements constitute job satisfaction* and how they relate to retention. If a faculty member is satisfied with her or his job, what is it about the job that is satisfying and results in retention? Appendix G lists the job satisfaction subscales and the elements that make up each part.

When retention was operationalized as “years at present institution,” the strongest correlation between retention and a job satisfaction category was “Regulation Procedures” ($r = .3435$). The items that compose this subscale collectively exert more influence on retention than any other subscale. These items

are academic ranking, sabbatical policies, consulting activities, reappointment policies, leaves of absence, and tenure. As was pointed out in chapter 4, this correlation does not indicate specifically which of these items exert more or less influence than others, nor does it mean that some item or items under another job satisfaction subscale may not exert more influence than any one of these items under the "Regulation Procedures" subscale. What it does mean is that, taken together as a whole, this group of items exerts more influence on retention than do other groups of items in the job satisfaction subscale.

Three other categories under the job satisfaction subscale also influence retention, although the correlations are much weaker than that of Regulation Procedure. Organizational Climate was one of the three. Its correlation with retention ($r = .2408$) indicated the importance collectively of the elements of which it is composed, namely, the administrative style of the dean or chair, job security, recognition for professional achievement and research, participation in institutional governance, the respondent's personal participation in the School of Nursing, and equitable treatment regarding promotion and the acquisition of tenure.

After Organizational Climate, the next category with a significant correlation was Salary and Benefits ($r = .2281$), indicating the importance collectively of the elements of which it is composed, specifically salary and salary increases, health insurance programs, retirement benefits, faculty parking, provisions for research, reimbursement for professional meetings, and faculty lounge/club.

Support Services, with an r of .2138, was the next category. It showed the importance to retention of a faculty member's satisfaction with another set of items collectively, namely, secretarial service, student assistants, teaching media aid center, clinical agencies, library, classroom assignments, laboratory skills facilities, and facilities for research.

The final significant item under the Job Satisfaction subscale was Nursing Institution Characteristics. Although it suggests minimum influence on retention ($r = .1721$), it is interesting to note that the items in this category were of some importance collectively with respect to job satisfaction and retention. This category consists of such elements as reputation of the school, geographic location, teaching and advising loads, class size, and the like.

Collegial Support and Nursing Faculty Retention

Data relevant to the second hypothesis of this study were inconsistent. The data revealed that as perception of collegial support increases, the probability of a faculty member's leaving her or his current institution decreases. However, the fourth hypothesis— which stated that perceived collegial support will vary on the basis of four professional demographic factors: academic rank, tenure status, level of professional education, and age—was accepted only in part, namely, for *rank*.

This study revealed that collegial support did vary on the basis of academic rank. However, the data revealed that tenure status, level of professional education, and age did not explain a significant proportion of variance in perceived collegial support.

There was a significant difference in the perception of collegial support related to a faculty member's academic rank. The difference is weak and indicates that perception of collegial support based on a faculty member's rank is tenuous. There was a tendency for faculty members with the higher academic ranks to have a more positive perception of collegial support. Associate professors had the strongest perception of collegial support ($M = 61.61$), and full professors had the next strongest perception of collegial support ($M = 60.32$).

This researcher suggests that nurse educators at the rank of associate or full professor are more likely to have developed a stronger professional network system, both internally and external to the institutional environment. Their rank affords such faculty members greater likelihood of tenure status, higher salaries, and opportunities to actively pursue professional and personal goals with less anxiety about job instability.

Another suggested explanation this researcher would put forth is that those at the rank of associate and full professor are more likely to be senior faculty, in the age range of 41-51 years, and are employed full-time at the institution. At this point in life, such faculty members are more likely to be settled into their careers and less likely to be considering a career change. These faculty ranks of associate and full professor provide more career stability and opportunities within their profession in terms of their research activities or in administration or in opportunities for consulting in the area of their expertise. The rewards at this level also may include prestigious professional status and allow more flexibility in program decision making and other academic undertakings. These factors may contribute to their

greater perceptions of collegial support by enhancing their confidence and trust. mutual support, creativity, open communication, freedom from threat of internal climate stressors, and team effort toward goal achievement.

Limitations

This study attempted to survey the entire population of nurse educators at the 12 baccalaureate and higher degree nursing programs in the Commonwealth of Virginia. However, of the total of 350 nurse educators constituting the study's population, 178 returned the survey instrument. It is possible that the 172 nurse educators (49%) who did not return the survey instrument may have been "qualitatively different" from those who did return the survey instrument. Also, the results of this study are only applicable to the 12 baccalaureate and higher degree nursing programs in Virginia. They cannot be applied to other types of nursing programs.

Suggestions for Future Research

Since this study focused only on the Commonwealth of Virginia, it would be desirable to replicate it on a national level. This would allow a comparison to see if the results would be the same or similar. Other research suggestions are as follows:

1. It would be especially of interest to ascertain whether the three professional-demographic factors which were not significant for collegial support in this study (tenure status, level of professional education, and age) would be significant in a national study.
2. Research to examine much more extensively differences between full-time and part-time nurse educators could also be undertaken. The results could be

of benefit to nursing administrators in future hiring on nursing faculty with regard to the proportion of each category of faculty members that would be most effective.

3. A study examining variables other than the four professional-demographic factors examined in this study would allow a possible expansion of variables that may impact retention.

4. This study combined baccalaureate and higher degree nursing programs. A study should be conducted to contrast nurse educators at these two degree levels. This should allow nursing administrators to focus their attention on the degree level that requires motivational assistance in either job satisfaction, collegial support, or both.

5. Administrators and faculty were examined jointly in this study. Research should be conducted that would focus on contrasting these two groups of nursing professionals. Again, this would identify which group could benefit from motivational assistance with regard to job satisfaction, collegial support, or both.

6. Students are the benefactors or losers as a result of the level of job satisfaction and collegial support that the nurse educator brings to the classroom. Therefore, it would be beneficial to conduct a study that focuses on nursing students' graduation rates compared with nursing faculty job satisfaction and collegial support results. The results would shed light on whether job satisfaction and collegial support impact nursing students' graduation rates positively, negatively, or have no impact.

7. This study employed a self-reporting survey technique. It may be of benefit to replicate the objectives of this study utilizing an in-depth interview

research design. Such an approach may reveal a more comprehensive analysis due to the extended interaction between the nursing faculty member and the trained interviewer which may result in the faculty member's being more forthright with responses.

8. A study focusing on the individual items that make up the job satisfaction and collegial support subscales in relation to retention would provide further information on the relative importance nursing faculty members attach to the various components that constitute job satisfaction and collegial support.

9. This study could be duplicated employing a 7-point Likert scale instead of the 4-point Likert scale utilized by this researcher. This would allow finer and more concise responses. Such responses may yield different or more comprehensive findings.

10. This study has compiled a data base concerning the relationship of job satisfaction, collegial support, and four professional-demographic factors (academic rank, tenure status, level of professional education, and age) to the retention of nurse educators in the Commonwealth of Virginia. It is hoped that it will contribute to the resolving of present and future U.S. nursing supply and demand imbalances.

Future Implications

According to the American Association of Colleges of Nursing, "Federal figures project not only that employment for RNs will grow much faster than the average for all occupations through 2005, but that beginning approximately 2010, demand for registered nurses will outstrip the expected supply" (AACN, 1997b, p. 3).

To meet the demand for practitioners, there must be an adequate supply of nurse educators. Nursing schools are the major source for preparing future nurse educators. These nurse educators will be the ones to continue producing the nurses in the new millennium. Therefore, it is important to retain the skills and expertise of incumbent nurse educators. Nursing administrators can help attain this objective through policy guidelines and procedures designed to implement job satisfaction and collegial support.

An inspired and motivated nurse educator faculty is likely to be characterized by job satisfaction and to contribute to collegial support, with strong commitment to the institution likely to result. The three common elements identified from the abundance of definitions of organizational commitment are (a) identification with the organization's goals and values, (2) willingness to expend effort for the organization, and (3) a wish to retain membership in the organization (Knoop, 1994). Such professional commitment on the part of nurse educators is likely to translate into a higher commitment to students. A satisfied faculty is probably more willing to invest the time to mentor; and a stronger bond, created through mentoring, between nursing faculty and nursing students is beneficial to all.

Communities throughout the nation can be expected to benefit from job satisfaction and collegial support policies through a possible ameliorating of the current and projected nursing supply-and-demand imbalance. As Carole Anderson, president of the American Association of Colleges of Nursing has emphasized, nursing educators must prepare clinicians who can function competently in the current complex health care environment which is business driven. This will

require nurse clinicians whose critical nursing skills are inclusive of budgeting, multidisciplinary teamwork, quality control, the use of advanced technology, and effective delegation and referral (Steefel, 1997).

This study's results should be of assistance to those within the nursing profession who exercise influence in establishing policy—specifically, organizations such as the American Nurses Association (ANA), the American Association of Colleges of Nursing (AACN), and the National League for Nursing (NLN). It is hoped that the implementation of this study's findings by policy makers and nursing school administrators will contribute to the overall health and stability of nursing both locally and nationally.

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Appendix A

LETTER OF PERMISSION FROM DR. BATISTE-BEATY

Estella H. Reynolds
4504 Kelley Court
Virginia Beach, VA 23462

April 7, 1997

Dr. Lynda Batiste-Beaty
5815 Leona Street
Oakland, CA 94605

Dear Dr. Batiste-Beaty:

As per our telephone conversation of September, 1994, I am writing to confirm your permission to use an adapted version of my tool "Perceptions of Afro-American Nursing Educators in Baccalaureate and Higher Degree Programs on Job Satisfaction and Collegial Support" in my dissertation research entitled "The Relationship Between Job Satisfaction and Collegial Support to Retention of Nurse Educators in Baccalaureate and Higher Degree Nursing Programs in Virginia". Please sign the release statement below to confirm permission:

I, Dr. Lynda C. Batiste-Beaty, grant permission for Estella H. Reynolds to use an adapted version of the questionnaire "Perceptions of Afro-American Nursing Educators in Baccalaureate and Higher Degree Programs on Job Satisfaction and Collegial Support" in her dissertation "The Relationship Between Job Satisfaction and Collegial Support to Retention of Nurse Educators in Baccalaureate and Higher Degree Nursing Programs in Virginia".

Dr. Lynda C. Batiste-Beaty
Dr. Lynda C. Batiste-Beaty

Keep the attach copy of this correspondence for your original in the enclosed self-addressed stamped envelope.

Sincerely yours,

Estella H. Reynolds

Estella H. Reynolds

Enclosures: Copy of original
Self-addressed stamped envelope

Appendix B**LETTER FROM HUMAN SUBJECT INSTITUTIONAL REVIEW BOARD**

To: Estella Henry Reynolds
4505 Kellyey Court
Virginia Beach, VA 23462

From: Valerian J. Derlega
Chair, Institutional Review Board
Old Dominion University

Re: Your research project entitled "Perceptions of nursing educators in baccalaureate and higher degree programs on job satisfaction and collegial support"

Date: February 21, 1997

The Old Dominion University Institutional Review Board met on Tuesday, February 18, 1997, and after examining federal and state statutes found that your study was exempt from our review process. You are free to proceed from our perspective with your data collection. Good luck.

Appendix C

JOB SATISFACTION RESPONSES*

The Job Satisfaction Questionnaire was composed of 44 items to ascertain the degree of satisfaction respondents experienced with various aspects of their job. A *percentage distribution* for each item is shown below. All items had 178 respondents.

ITEM	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	NA
Student advising load	23.0	51.1	12.4	2.2	11.2
Salary	3.9	48.3	30.3	16.9	.6
Secretarial services	9.6	43.8	29.8	14.6	2.2
Academic ranking	15.7	57.9	13.5	4.5	8.4
Competency of colleagues	28.7	57.3	9.6	3.4	1.1
Administrative style of Dean/Chair	33.7	44.4	12.4	7.9	1.7
Geographic location	53.4	34.8	8.4	2.8	.6
Health insurance programs	23.0	44.9	12.9	4.5	14.6
Sabbatical policy	11.2	31.5	11.8	9.6	36.0
Reputation of school	29.8	57.3	10.1	1.7	1.1
Recognition for research	13.5	42.7	9.0	1.7	33.1
Size of institution	30.3	63.5	2.8	.6	2.8
Faculty parking	20.2	45.5	18.0	15.2	1.1
Clinical agencies	24.2	59.0	9.6	2.2	5.1
Reappointment policies	14.6	59.6	10.7	1.7	13.5
Library	27.0	43.3	18.5	9.6	1.1
Teaching Load	14.0	60.1	17.4	6.2	2.2
Faculty lounge/club	4.5	20.8	17.4	15.7	41.6
Salary increases	1.7	36.5	28.1	28.7	5.1
Retirement benefit	15.2	51.1	11.2	7.3	15.2
Individual autonomy	45.5	43.3	9.0	1.1	1.1

(table continues)

(continued)

ITEM	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	NA
Student assistants	10.1	27.0	12.4	12.9	37.6
Security—freedom from threat of losing job	12.4	33.1	8.4	5.1	41.0
Academic quality of the students	14.0	66.9	15.2	2.8	1.1
Reimbursement for professional meeting	11.8	36.0	26.4	11.8	14.0
Teaching media aid center	14.6	42.7	26.4	5.6	10.7
Consulting activities	9.0	43.3	14.0	2.2	31.5
Class size	16.3	61.8	15.7	3.9	2.2
Provisions for research	6.2	33.7	29.2	10.1	20.8
Summer school teaching	7.3	45.5	11.8	3.9	31.5
Collegiality amongst colleagues	25.3	51.7	12.9	7.9	2.2
Recognition for professional achievement	18.5	54.5	13.5	5.1	8.4
Leaves of absence	9.6	44.4	10.1	5.1	30.9
Classroom assignment	10.1	64.6	17.4	2.2	5.6
Participation in institutional governance	12.9	51.1	15.2	3.9	16.9
Congeniality of colleagues	29.2	47.8	14.6	5.1	3.4
Your participation in school of nursing	33.1	54.5	6.7	1.7	3.9
Facilities for research	3.9	30.3	30.9	11.8	23.0
Tenure	10.7	29.8	16.9	5.1	37.6
Promotion policies	7.3	43.8	18.5	7.3	23.0
Academic freedom	24.2	57.9	11.2	2.8	3.9

(table continues)

(continued)

ITEM	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	NA
Class hours	18.5	60.1	13.5	3.4	4.5
Laboratory skills facilities	14.0	37.6	30.3	10.1	7.9
Equitable treatment regarding promotion and acquisition of tenure	10.1	37.6	19.1	7.3	25.8

*The Job Satisfaction Questionnaire read, "Each of the following items pertains to a condition or factor relating to *job satisfaction*. Indicate how you feel about the condition or factor at the present time by writing the appropriate letter using the following key:

- a. I am *very satisfied* with the condition or factor.
- b. I am *satisfied* with the condition or factor.
- c. I am *dissatisfied* with the condition or factor.
- d. I am *very dissatisfied* with the condition or factor.
- e. N/A or left blank."

Appendix D

COLLEGIAL SUPPORT RESPONSES*

There are 22 items on the "Survey of Collegial Communication." A percentage distribution for each item is shown below. All items had 178 respondents.

ITEM	Very considerable degree	Considerable degree	Slight degree	Does not exist
Do faculty coordinate their efforts in working toward group goals?	17.6	43.2	6.4	12.8
Do faculty feel free to exchange ideas and opinions?	26.1	43.7	27.3	3.4
Do faculty help to orient and socialize new colleagues?	15.3	35.2	38.1	11.4
Do faculty stimulate creativity among colleagues?	13.1	4.4	35.8	9.7
Are faculty able to resolve differences with ease?	8.5	38.6	39.8	13.1
Is trust promoted among faculty colleagues?	10.8	43.8	30.7	14.8
Is criticism among faculty members constructive?	9.1	43.8	34.7	12.5
Do faculty feel free to discuss job related problems with colleagues?	16.5	43.8	31.3	8.5
Are faculty willing to share knowledge in their fields of expertise?	33.0	44.9	19.9	2.3
Do faculty support the creative efforts of their colleagues?	22.2	42.0	31.3	4.5
Do faculty promote a relaxed, nonstressful work atmosphere?	15.3	41.5	31.8	11.4
Do faculty maintain high standards of group performance?	25.0	44.9	26.1	4.0
Do faculty feel confident to "be themselves" among colleagues?	19.3	43.2	29.5	8.0

Appendix D continues

(continued)

ITEM	Very considerable degree	Considerable degree	Slight degree	Does not exist
Do faculty deal with conflict openly and objectively?	7.4	34.7	40.6	17.6
Do colleagues attempt to solve job related problems?	13.6	43.8	35.2	7.4
Are faculty willing to adopt new ideas and approaches to job-related problems?	14.8	42.6	37.5	5.1
Do faculty establish and maintain friendly working relationships with colleagues?	21.0	46.1	27.3	5.7
Do faculty encourage each other to work as a team?	19.3	38.1	36.9	5.7
Is information about important events shared within the faculty?	24.4	50.0	19.3	6.3
Are faculty receptive to the ideas and suggestions of colleagues?	16.5	44.4	35.8	3.4
Is there support to integrate culturally diverse content into the curriculum?	31.3	49.5	17.6	1.7
Does face-to-face communication among faculty have a relaxed, "easy-going" tone?	18.8	47.2	28.4	5.7

* The Survey of Collegial Communication, which was used to measure perceived degree of collegial support, read as follows:

Each of the items which follow pertains to a condition or factor relating to *collegial communication*. Indicate how you currently feel *about each of these conditions or factors* by writing the appropriate letter, using the following key:

- a. This factor or condition exists to a *very considerable degree*.
- b. This factor or condition exists of a *considerable degree*.
- c. This factor or condition exists to a *slight degree*.
- d. This factor or condition *does not exist*.

Appendix E
QUESTIONNAIRE LETTER
HAMPTON UNIVERSITY
 HAMPTON, VIRGINIA 23668

SCHOOL OF NURSING
 (757) 727-5251/5252

February 7, 1997

Dear Colleague:

I am a doctoral candidate in the Urban Services Program at Old Dominion University, Norfolk, Virginia. I am writing to solicit your assistance in helping me to complete my dissertation research.

As you know, higher education is in the throes of many transitions. These transitions are challenging colleagues and universities to change their approach to the delivery of their educational programs. Thus, the purpose of this dissertation research is to identify and compile a comprehensive set of factors that may significantly effect job satisfaction, collegial support and retention of nurse educators in baccalaureate and higher degree programs in Virginia. Your participation is essential in examining these factors and will contribute to the successful implementation of future educational change efforts.

Completed questionnaires from faculty members of the twelve baccalaureate and higher degree programs in Virginia are needed to conduct this research. Since you are teaching in a nursing baccalaureate and higher degree program, you were selected as a participant in the research. Thus, I am requesting your assistance by completing the enclosed questionnaire.

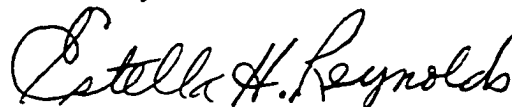
Approximately fifteen minutes are needed to complete the enclosed questionnaire. Your responses will be kept strictly confidential and no individual or institution will be identified. Questionnaires are coded to facilitate sending follow-up letters to those individuals who have not returned the questionnaires within the established period of time. When the desired sample size is obtained, the coding information will be destroyed. All information will be kept in strictest confidence and reported in statistical aggregates only. Background demographic information is collected for correlational purposes only. Return of the questionnaire will be taken as your consent to participate in the research.

Please complete the enclosed questionnaire and return it in the envelope. An addressed envelope has been provided for your convenience. Please return the questionnaire by February 28, 1997. Upon your request, you will receive a summary of the research results.

Page 2

Thank you sincerely for your anticipated participation in this research. Your time and effort spent are considered invaluable. If you have any questions, please call me at (757) 490-1575 or my dissertation advisor, Dr. Dana Burnett at (757) 683-3442.

Sincerely,

A handwritten signature in cursive script that reads "Estella H. Reynolds". The signature is written in black ink and is positioned above the printed name.

Estella H. Reynolds. M.S.N., R.N.

Enclosure

Appendix F

RESEARCH INSTRUMENT

The instrument used to collect the data for this study consisted of a survey questionnaire that Batiste-Beaty (1990) adapted from a Job Satisfaction Questionnaire (Marriner, 1975) and a Survey of Collegial Communication Questionnaire (Beyer, 1981). Batiste-Beaty's questionnaire consists of three sections: Background Data; Job Satisfaction and Survey of Collegial Communication.

The Job Satisfaction section is made up of six subscales (Appendix G). The Collegial Communication section also consists of six subscales (Appendix H).

The Background Data section is divided into three sections: (a) *Professional Data*, (b) *Professional Activities*, and (c) *Personal Data*.

The Professional Data section is made up of 15 items designed to obtain information on such matters as the size of the respondent's institution, the respondent's education, academic rank, any administrative positions held, employment history, and tenure status.

The Professional Activities section includes 11 items designed to obtain information regarding research, publishing, efforts toward tenure, and collegial resources.

The remaining 8 items, listed under *Personal Data*, seek information on demographic characteristics such as age, gender, marital status, and family.

*For more information on the instrument developed by Batiste-Beaty, she may be contacted at the address provided in her letter giving permission to use this instrument in the study reported here (Appendix A)

Appendix G

JOB SATISFACTION SUBSCALES

1. Nursing Institution Characteristics
 - 1) Student Advising Load
 - 2) Geographic Location
 - 3) Reputation of School
 - 4) Academic Quality of Students
 - 5) Class Size
 - 6) Summer School Teaching
 - 7) Size of Institution
 - 8) Teaching Load
 - 9) Class Hours
2. Salary and Benefits
 - 1) Salary
 - 2) Health Insurance Programs
 - 3) Reimbursement for Professional Meeting
 - 4) Provisions for Research
 - 5) Faculty Parking
 - 6) Faculty Lounge/Club
 - 7) Salary Increases
 - 8) Retirement Benefit
3. Support Services and Facilities
 - 1) Secretarial Service
 - 2) Student Assistants
 - 3) Teaching Media Aid Center
 - 4) Clinical Agencies
 - 5) Library
 - 6) Classroom Assignments
 - 7) Facilities for Research
 - 8) Laboratory Skills Facilities
4. Regulation Procedures
 - 1) Academic Ranking
 - 2) Sabbatical policies
 - 3) Consulting Activities
 - 4) Reappointment Policies
 - 5) Leaves of Absence
 - 6) Tenure
 - 7) Promotion Policies
5. Professional Behavior

- 1) Competency of Colleagues
- 2) Individual Autonomy
- 3) Collegiality Amongst Colleagues
- 4) Congeniality of Colleagues
- 5) Academic Freedom

6. Organizational Climate

- 1) Administrative Leadership/Style of Dean/Chair
- 2) Security-Freedom from Threat of Losing Job
- 3) Recognition for Professional Achievement
- 4) Recognition for Research
- 5) Participation in Institutional Governance
- 6) Your Participation in School of Nursing
- 7) Equitable Treatment Regarding Promotion and Acquisition of Tenure

Appendix H

COLLEGIAL SUPPORT SUBSCALES

1. Confidence and Trust

- 1) Is trust promoted among faculty colleagues?
- 2) Do faculty feel confident to "be themselves" among colleagues?

2. Team Effort Toward Goal Achievement

- 1) Do faculty coordinate their efforts in working toward group goals?
- 2) Do faculty maintain high standards of group performance?
- 3) Do faculty encourage each other to work as a team?

3. Open Communication

- 1) Do faculty feel free to exchange ideas and opinions?
- 2) Do faculty feel free to discuss job-related problems with colleagues
- 3) Do faculty deal with conflict openly and objectively?
- 4) Is information about important events shared within the faculty?

4. Mutual Support

- 1) Do faculty help to orient and socialize new colleagues?
- 2) Are faculty willing to share knowledge in their fields of expertise?
- 3) Do colleagues attempt to resolve job-related problems?
- 4) Are faculty receptive to the ideas and suggestions of colleagues?

5. Creativity

- 1) Do faculty stimulate creativity among colleagues?
- 2) Do faculty support the creative efforts of their colleagues?
- 3) Are faculty willing to adopt new ideas and approaches to job-related problems?
- 4) Support to integrate culturally diverse content into curriculum?

6. Freedom from Threat

- 1) Are faculty able to resolve differences with ease?
- 2) Is criticism among faculty constructive?
- 3) Do faculty promote a relaxed, nonstressful work atmosphere?
- 4) Do faculty establish and maintain friendly working relationships with colleagues?
- 5) Does face-to-face communication among faculty have a relaxed, "easy-going" tone?

Appendix I

ANALYSIS OF VARIANCE RESULTS FOR JOB SATISFACTION BY

PLANNING TO LEAVE PRESENT INSTITUTION

Source	Degrees of Freedom	Sum Of Squares	Mean Squares	F Ratio	Probability
Between Groups	1	5080.3569	5080.3569	10.2726	.0016
Within Groups	176	8704.7555	494.5554		
Total	177	92122.1124			

Group	Mean	Standard Deviation
No	112.6905	22.1441
Yes	100.9423	22.4686
Total	109.2584	22.8137

Appendix J

ANALYSIS OF VARIANCE RESULTS FOR COLLEGIAL SUPPORT BY PLANNING TO LEAVE PRESENT INSTITUTION

Source	Degrees of Freedom	Sum Of Squares	Mean Squares	F Ratio	Probability
Between Groups	1	2210.5519	2210.5519	10.3598	.0015
Within Groups	174	37127.6072	213.3771		
Total	175	39338.1591			

Group	Mean	Standard Deviation
No	61.6160	13.9987
Yes	53.8039	16.0175
Total	59.3523	14.9930

VITA

Estella Mary Henry Reynolds was born in Acree, Georgia and received her Bachelor of Science degree in nursing, with high honors, from Tuskegee Institute at Tuskegee, Alabama in May, 1960. She received her Master of Science degree from Wayne State University in medical-surgical nursing and clinical teaching in 1963.

She held positions in Atlanta as staff nurse and clinical instructor at Grady Memorial Hospital School of Nursing and as clinical instructor and medical-surgical nursing curriculum director at St. Joseph Infirmary School of Nursing. She worked as an assistant professor in the Department of Nursing and the School of Urban Life at Georgia State University before becoming a tenured associate professor at Hampton University in 1982, the position she currently holds. Twenty-seven of her 36 years of teaching experience have been in baccalaureate education.

Estella Reynolds is a member of the Virginia Nurses' Association and the American Nurses' Association. She serves on several boards, including the Virginia Health Planning Board, Action Alliance for Virginia's Children and Youth, and Hope House Foundation. A member of Alpha Kappa Mu Honor Society and Sigma Theta Tau International Honor Society, she is included in *Who's Who of American Women*, 14th ed., 1985-86.